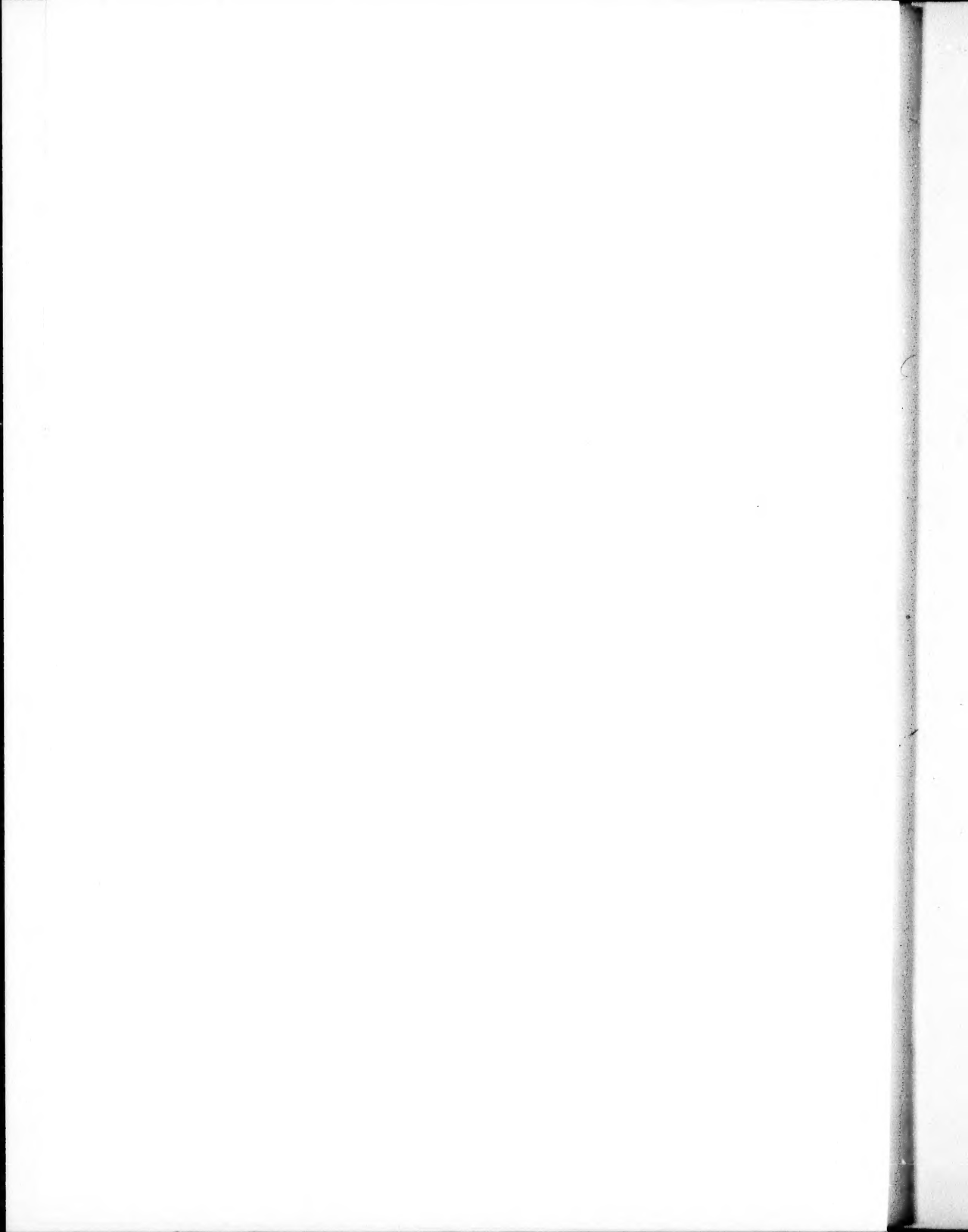




THE PROPOSALS
OF THE
FRENCH SYNDICATE
PRESIDED OVER BY COUNT DUCROS
TO THE
GOVERNMENT OF CANADA

SUMMARY:—1. Letter from Count Ducros to Hon. J. H. Pope.—2. Letter from MR. E. Kamper to Hon. J. H. Pope.—3. Appendix 1, 2, 3.—4. Map of the Great Eastern Railway of Canada.

PARIS, March 11th, 1887.

HONORABLE J. H. POPE,
Minister of Railways and Canals,
OTTAWA.

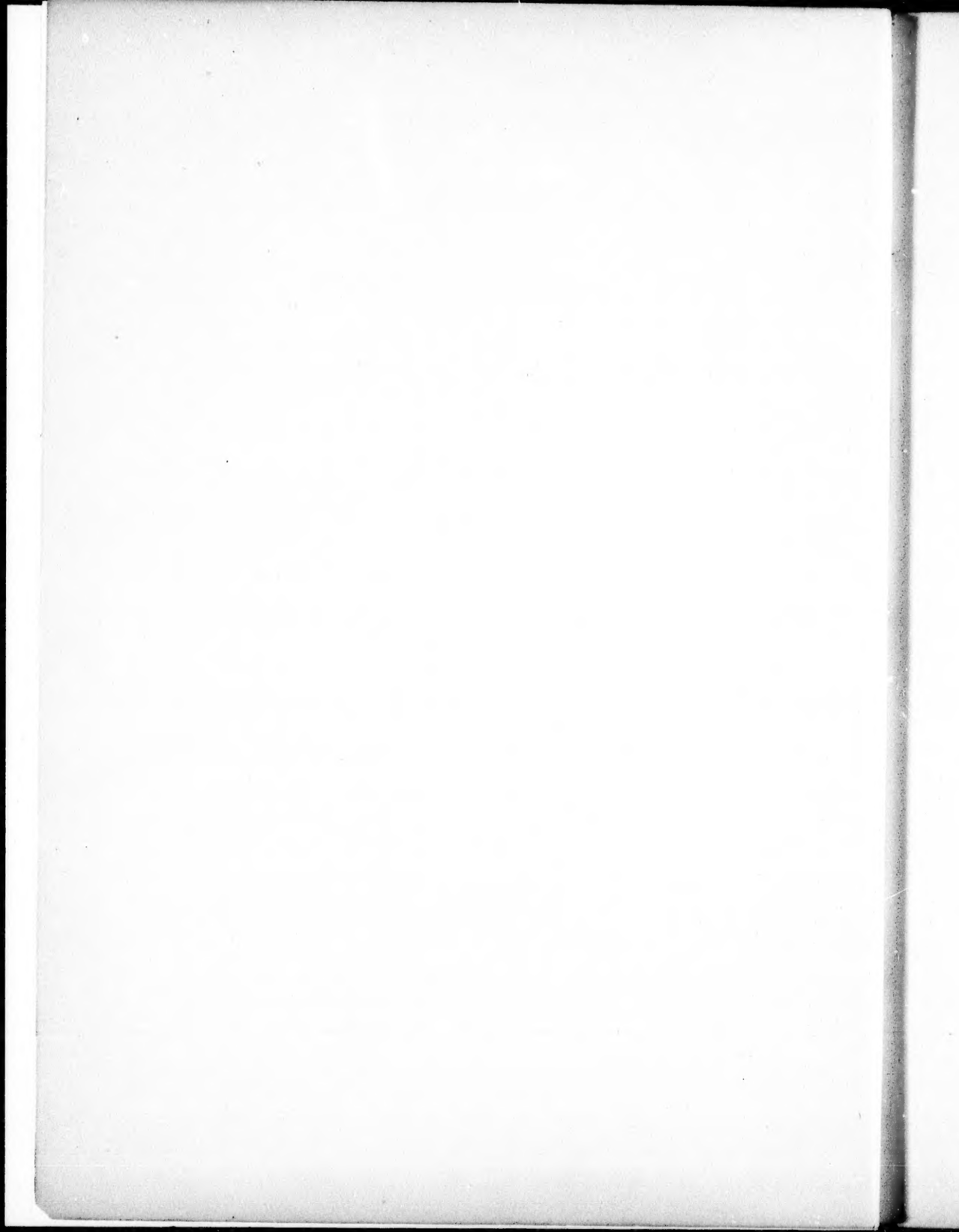
SIR,

I have the honor to submit to your approval the following definite proposals :

1. Concerning the contract for the construction of the four lines of the Eastern Division, from Moncton to Oxford or Pugwash ; from Oxford and Pugwash to Pictou, from Sydney to Louisburg and especially the line from Hawkesbury to Sydney by the Grand Narrows.

2. Concerning the establishment in Nova Scotia of a manufacture of rails.

3. Concerning the *Great Eastern Railway of Canada* including the *Intercolonial* as a main line.



PROPOSAL No. 1.

The construction of the three lines, from Moncton to Oxford, from Oxford to Pictou and from Sydney to Louisburg, not being considered of an immediate necessity, the Syndicate wish nevertheless to intimate that they are ready to undertake their construction, so soon as the Government decides upon it, and will duly consider at the proper time all questions having reference to these lines, viz: (Green difficulties, Surveys, Reports, Subsidies, &c., &c.)

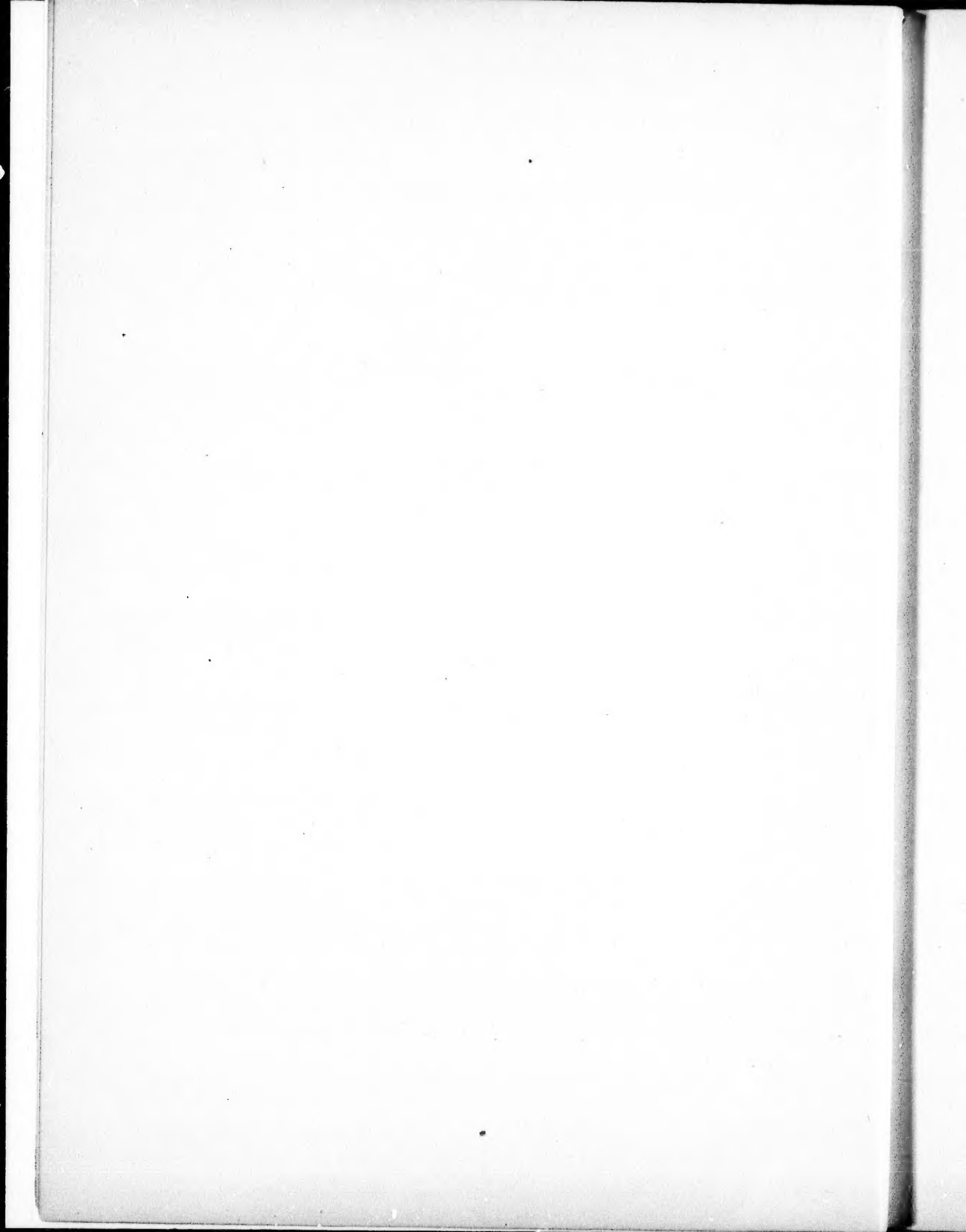
The line from Hawkesbury to Sydney by the Grand Narrows, having to be constructed immediately according to the Government's wish, the Syndicate remitted to the Government, on the 11th of January last, a definite proposal for the construction of that line at a cost of \$3,000,000.

In case the Government would grant our Syndicate the construction of the four above mentioned lines and more especially that of Hawkesbury, by the Grand Narrows, it is understood that the whole work will be entrusted to the "*Compagnie des Hauts-Fourneaux, Forges et Aciéries pour la Marine et les Chemins de Fer,*" Société anonyme au capital de 20,000,000 de francs, (CIE DE ST. CHAMOND, M. DE MONTGOLFIER, General Manager).

The delay granted for the full execution of the work will be mutually agreed to between the Government and Syndicate.

The Syndicate accepts all the conditions and charges which apply to and are customary to railroad construction in Canada.

The Syndicate will deposit in the hands of the Government as security for the fulfilment of the contract any reasonable sum which may be mentioned and will expect interest on such deposit at 4 per cent; the work to be paid for, as it progresses, reasonable drawback being retained; or the Syndicate or its contractors will furnish the money and build a railway, taking in exchange government annuities payable at long dates say 25 or 30 years, with interest at 4 per cent. payable semi-annually.



PROPOSAL No. 2.

Mr. DE MONTGOLFIER, General Manager of the ST. CHAMOND CO., submitted to the Syndicate the following conditions, according to which, he and a group of capitalists are ready to establish in Canada a manufacture of rails.

A—The works will comprise:

Two blast furnaces capacity about 180 cubic yards (*mètres*) having an average output of 75 tons per 24 hours.

Two Bessemer machines (*convertisseurs*) using first smeltings.

A roughing machine (*train ébaucheur.*)

A finishing machine (*train finisseur.*)

A finishing shop and all buildings, machinery and general appliances necessary to the proper management of the works.

B—The ordinary annual production, we calculate, would be 40,000 tons, but should business increase, the works could be enlarged and made to furnish a much larger output.

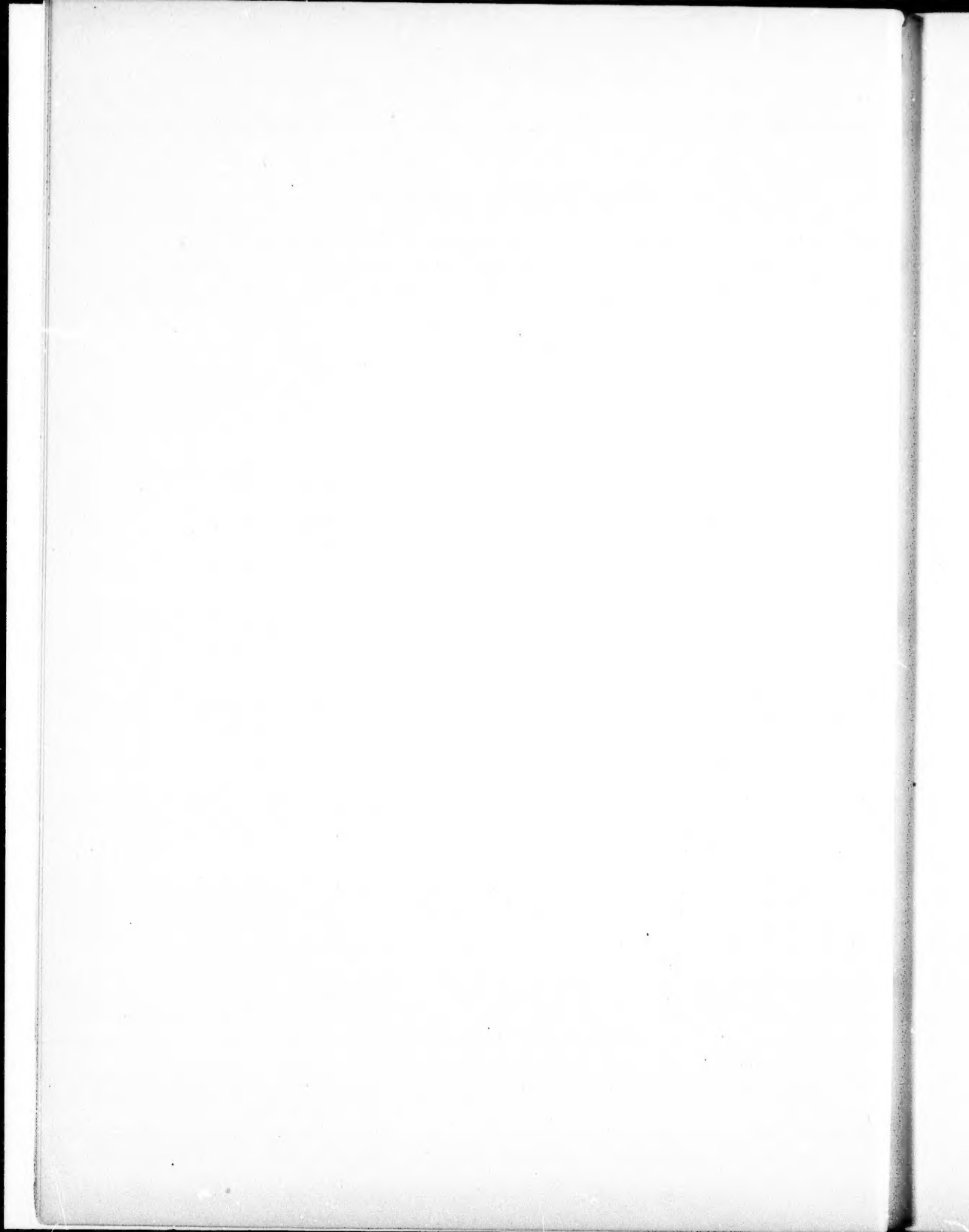
C—On all points in France, where Rail Factories have been established, the Government always assisted their first efforts by granting their proprietors protective treaties which compelled subsidized Railways to purchase a stated minimum of Rails averaged over a certain number of years.

This same system of protection was followed in Italy, Austria and Germany.

In Russia, the government authorities adopted the same plan not only to favor the establishment of special iron works, but also to protect ordinary furnaces producing pig-iron, iron and common steel.

We therefore respectfully request: That an order for 200,000 tons of Rails (to be delivered within six years) be given to the new company.

This request, most reasonable in its tenor, would offer no difficulty to the Government inasmuch as in the granting of its annual subsidies to Railway Companies it could stipulate that one portion is to be made payable in money and the other portion in Rails or other Railway supplies.



D—That all the machinery, tools and plant generally used in rail factories and the fitting up of the same be admitted free of duty. Also, that the rails needed for the construction of the different lines of the *Eastern Division* by the St. Chamond Company be also admitted free of duty should the Syndicate be granted the contract.

E—That a duty of \$17 per ton be levied during ten years, from 1887, on rails and other railway supplies of foreign manufacture.

This stated period of ten years is considered necessary to the establishment on a firm basis in the country, of works of this kind.

F—In order to allow of the question of the quality of the ore obtained from the iron mines situated in the vicinity of the Nova Scotia coal regions, to be ascertained and also of the possible output of these iron mines (two questions which so far have not been elucidated) a certain delay is necessary.

These questions however would be very soon solved as it is our intention to adopt immediate steps to bring them to issue so soon as the Government acquiesces to the above conditions.

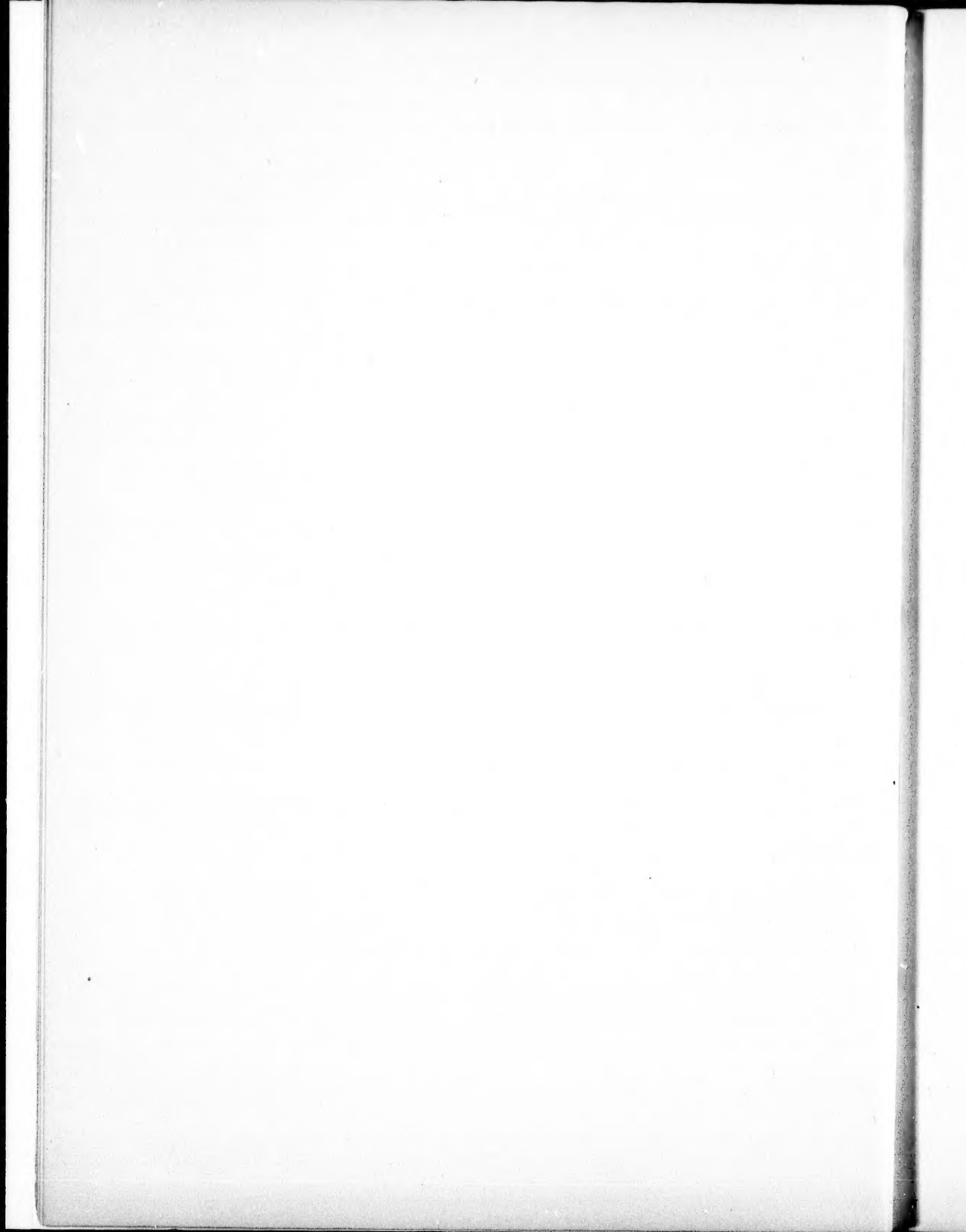
PROPOSAL No. 3.

THE GREAT EASTERN RAILWAY OF CANADA, WITH THE INTERCOLONIAL AS A MAIN LINE.

The Syndicate would respectfully request from the Government the following:

1. The operating (*l'exploitation*) of the *Intercolonial* with its projected branches and Eastern Extension to one of the Extreme Ports on the Atlantic; the net proceeds of these lines to be annually divided, viz: **X** % being allowed to the syndicate or to the company representing its interest; **Y** % being allowed to the Government to constitute the revenue and sinking fund upon the sums spent in the construction and completion of the lines

2. The construction and operating of a line to form a continuation of the New Brunswick Line, in the direction of Quebec, under



such conditions as will prove the most favourable to the great interests at stake, viz : the colonisation and industrial development of the Eastern Provinces. The syndicate will prepare a plan of the line and discuss with the Government, the subsidies to be given and dates at which they will be paid.

3. The construction of a bridge, across the St. Lawrence, at Quebec, with its connections and abutments, making a total length of about four miles.

The Syndicate will take charge of the plans of the project in view and discuss amicably as to the form to be given and sums to be paid in subsidies by the Government, the province and city of Quebec.

The three above mentioned awards (*concessions*) will constitute a system of railways destined to promote considerably the colonisation of the South Eastern portion of Canada and develop to their full extent the industrial resources of Nova Scotia.

It is estimated that to complete the plans and estimates of the projected lines and put the *Intercolonial* upon a rational and economical basis, a delay of a year will be necessary, counting from the day the agreement is signed.

The delay of one year having expired the above conditions will change and from an *eventual* will become a *permanent* and *definite* contract.

It is understood that in case the above mentioned eventual awards (*concessions éventuelles*) embodied in Nos. 1, 2, 3 would not be converted by the Government and Parliament into awards of a final and permanent character, (*concessions définitives*) the present eventual award, which the syndicate now asks, will be of right null and void and the syndicate will not be entitled to the refunding, by the Government, of the sums expended.

Mr. Kampfer, now at present in Canada, will deliver you this letter and enter into negotiations with the view of bringing matters to a successful issue.

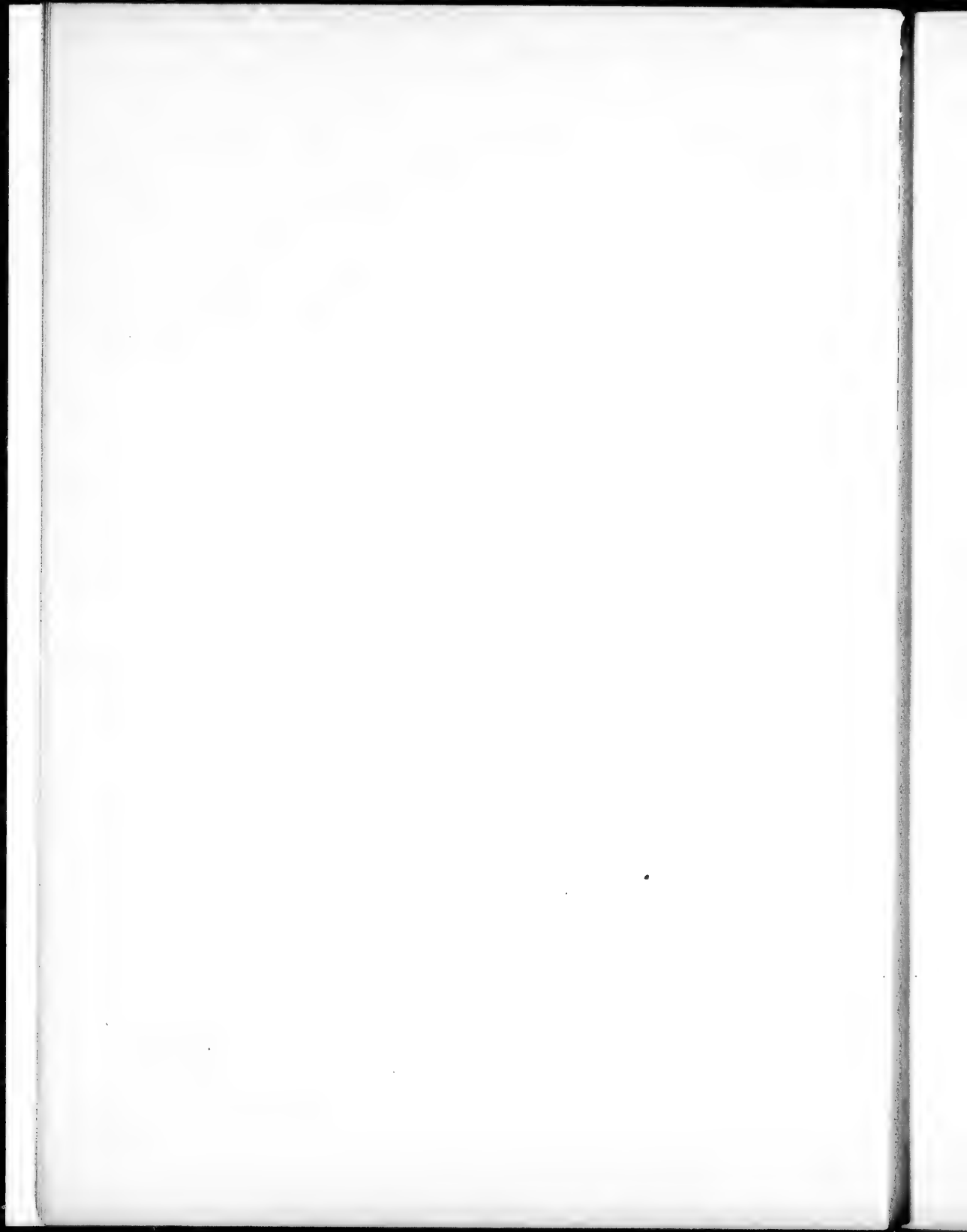
I have the honor to be

Sir,

Your most obedient servant,

The President of the Syndicate,

COUNT DUCROS.



To the

HONORABLE J. H. POPE,

Minister of Railways and Canals,

OTTAWA.

SIR,

The Syndicate which I have the honor of representing in Canada has sent me the enclosed firm proposals with regard to the three projects which have been now under consideration for some time.

1. A proposal for the lines to be constructed called "*The Eastern Division of the Short Line.*"

2. A proposal for the establishment of Rail works in Nova Scotia.

3. The working of a system called the GREAT EASTERN RAILWAY OF CANADA with the INTERCOLONIAL as a main line.

Allow me, Sir, to add to each of these three proposals a few words of explanation, in order to show more clearly the views and intentions of the Syndicate.

I.

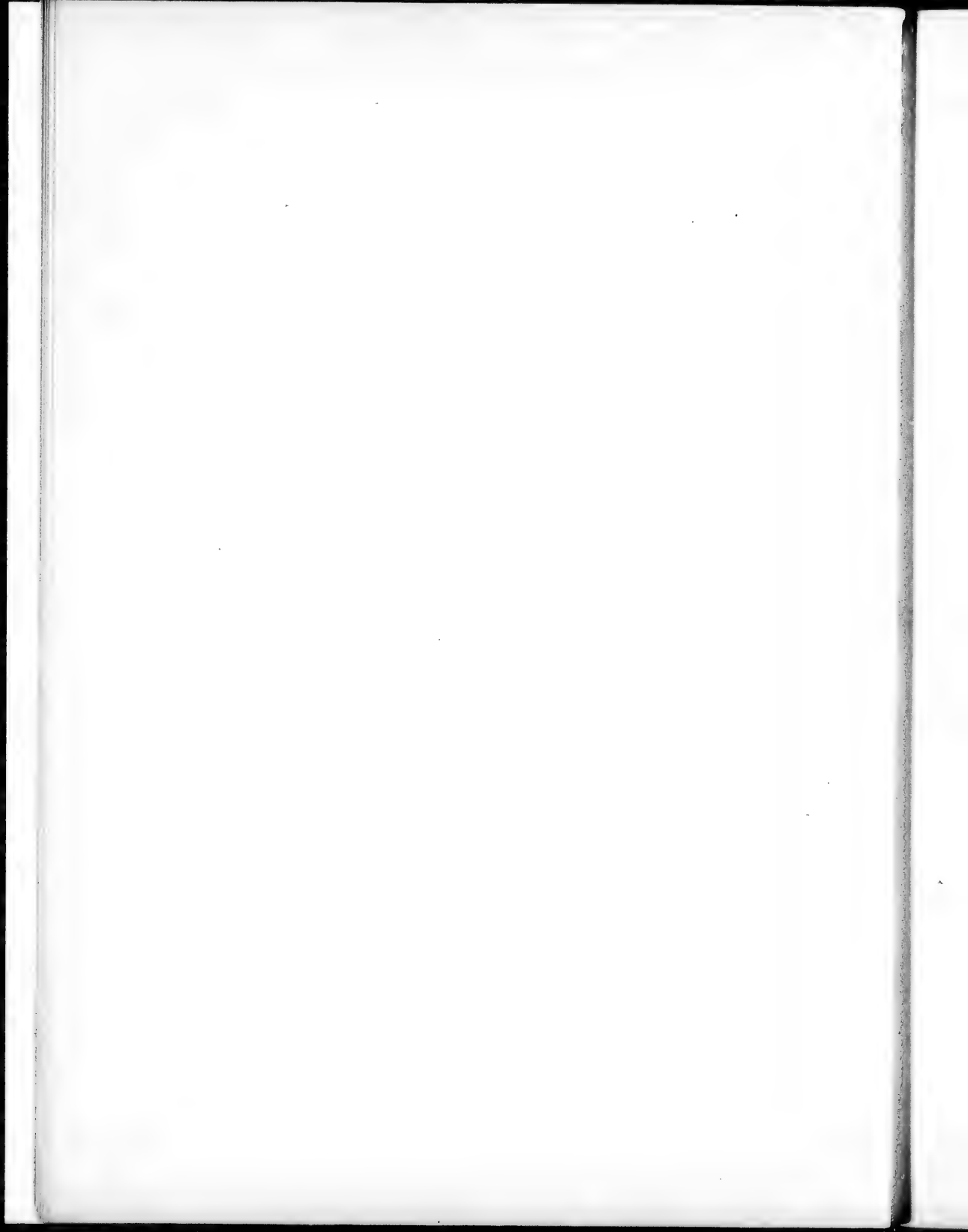
EASTERN DIVISION FOUR LINES.

The work to be accomplished to complete the *Intercolonial* system and extend it to the extreme East, as far as the Atlantic, may be designated under the general title of the *Eastern Division* and comprises the following lines:

A—MONCTON TO OXFORD OR PUGWASH.

On this line the surveys and estimates are wanting.

The Syndicate would, however, undertake the building of this line after due discussion of the figures and subsidies to be granted by the Federal Government. This is the only line, which would be subjected to a delay, the inconveniences of which are not great considering the fact that the line is already completed at both ends.



B—OXFORD AND PUGWASH TO PICTOU.

The work to complete this line, which is about 66 miles long, would be awarded to the Syndicate which is ready to furnish a tender, as soon as the Federal Government has settled with the GREEN CO'Y. all questions now in dispute as to the value of the work already done by the latter.

C—SYDNEY TO LOUISBURG.

To maintain communication between Sydney and Louisburg harbour, a harbour which is open all the year round, is a necessity which can be met in either of the following:

1. By widening for a length of 42 miles, the actual line and by rebuilding all the line works with the exception of the Mira River bridge and the South Sidney and Louisburg wharves by replacing the rails now in use, by rails of 56 english lbs per yard, over one third of the distance; by providing the whole line with new ties.

2. Or, by building a new and much shorter road from Sidney to the Mira River bridge, and then widening the remainder of the present road, from the Mira River bridge to Louisburg.

In both cases, the Syndicate is ready to negotiate with interested parties for the transfer of the line in its present state.

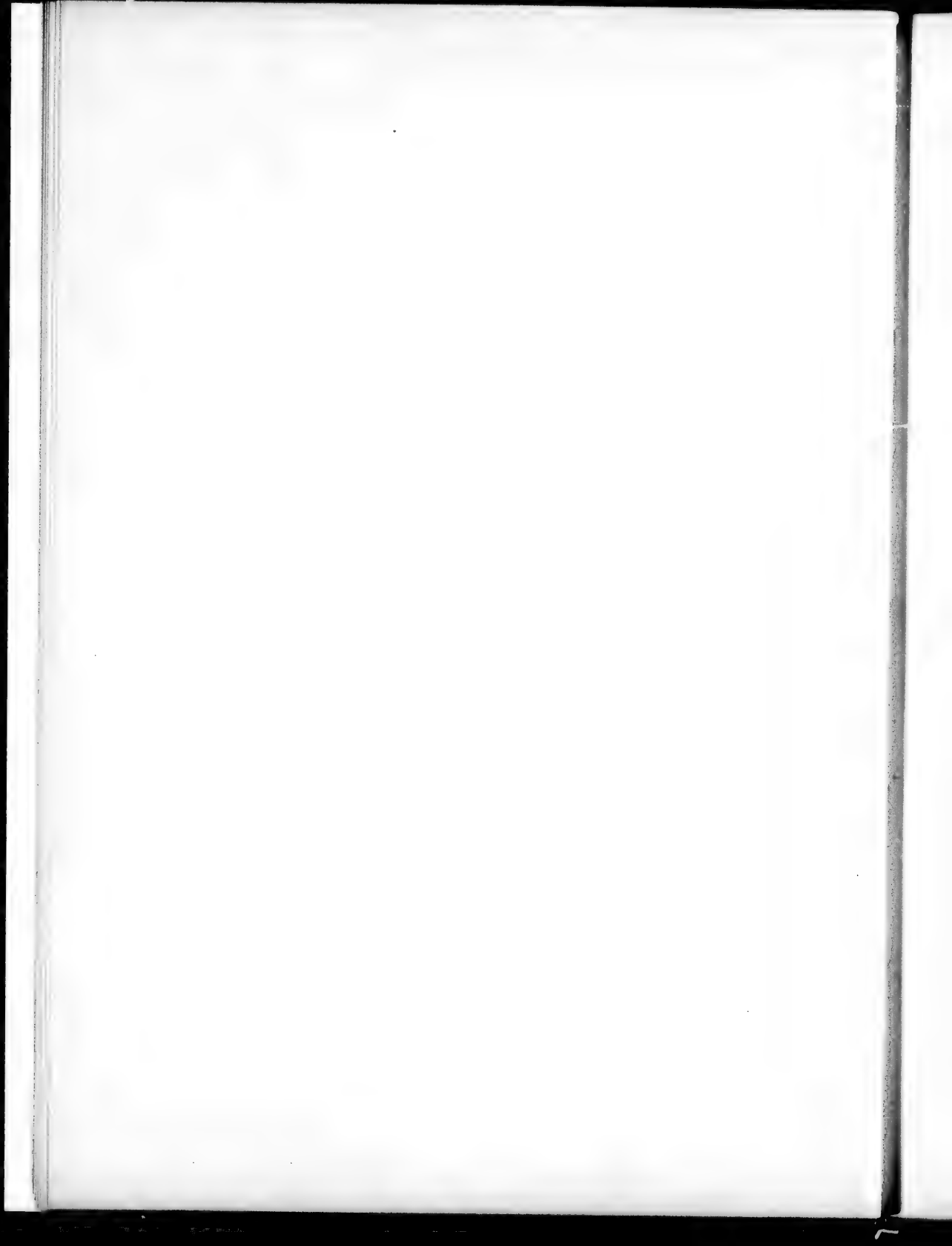
D—HAWKESBURY TO SIDNEY BY THE GRAND NARROWS. LENGTH 91 MILES

The surveys on this line have been made, and the Syndicate respectfully requests that the work be immediately awarded.

The tender for the construction of this line, was remitted to you, Sir, on the 11th of January last. Its total represented a sum of \$3,000,000

If this price, Sir, seems to be high, the Syndicate having made this line the object of a special study, respectfully beg permission to give the reasons why the figures appear high, by furnishing the particulars of the work to be done.

They feel satisfied that by calculating upon Schedule prices, the sum they ask will prove in conformity with the estimates made of the



cost by the Government itself and in no manner of an exaggerated character. They feel confident further more, that any difficulty on this point could easily be adjusted between the Government and themselves.

The following gives a correct idea of the work to be executed on the line :

The line runs from Hawkesbury to South Sidney, passing over the Grand Narrows ; its total length is 91 miles.

For the passage of the Strait of Canso we have provided a ferry boat capable of carrying ten cars, with suitable wharves.

For the passage of the Grand Narrows, two wharves and a second ferry boat capable of containing ten cars have also been provided.

A principal station at Hawkesbury, with warehouses for freight, and an engine-house for two engines ; a similar station at Sidney ; an engine-house on each side of the Grand Narrows and eight intermediate stations, which makes an average distance between stations of eleven miles.

The road which is to be *Standard* gauge road, will be laid with rails weighing 56 english lbs. per yard.

The rails will be laid on ties numbering 2600 to the mile and thoroughly ballasted.

The telegraph wires, two in number, will be fixed on poles situated at a distance from one another of 50 yards.

The viaducts, culverts and other line works will be of two kinds :

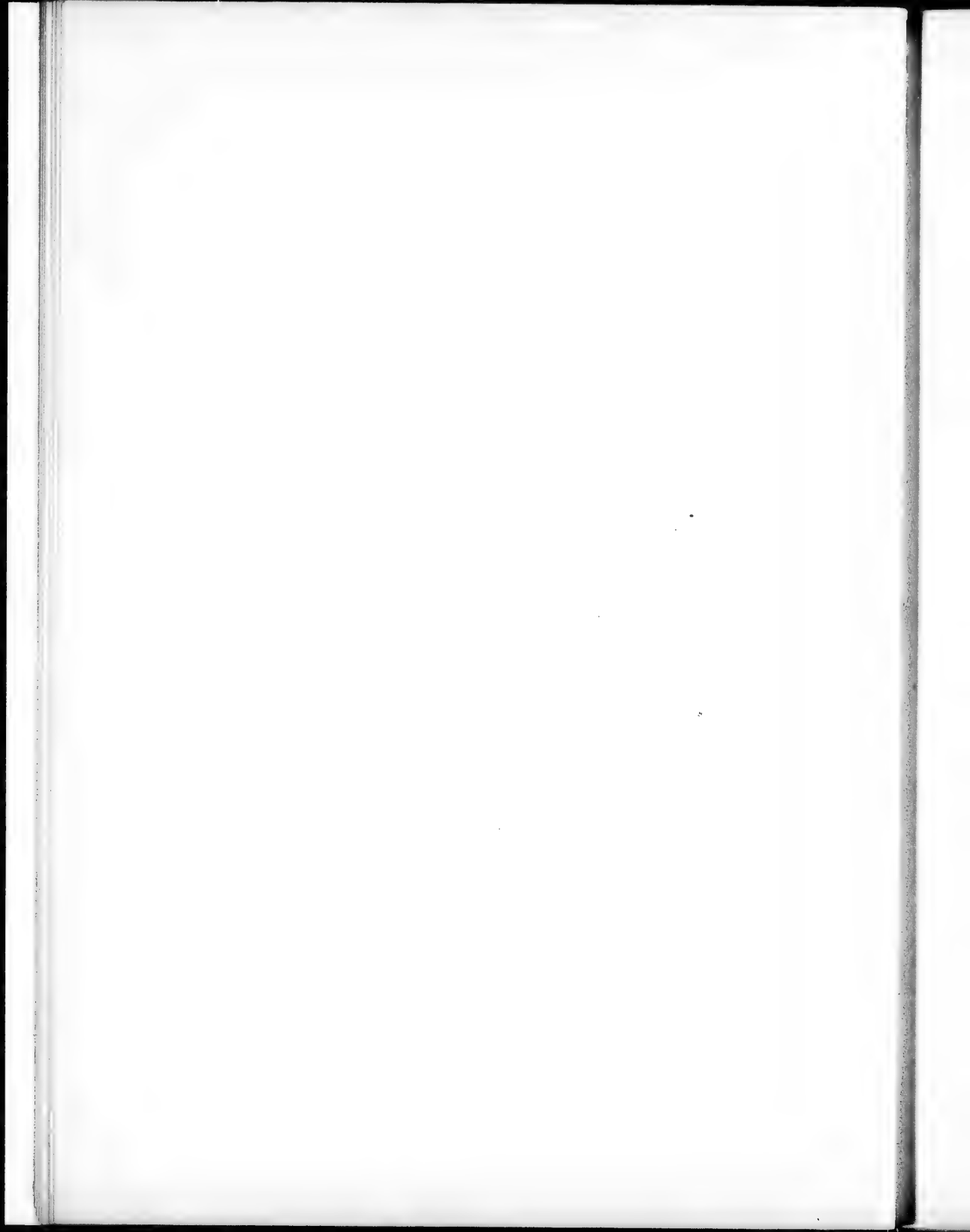
1st Works with an opening of less than 20 feet, in masonry, 116 culverts measuring altogether 2413 feet ; 10 smaller culverts measuring from 2 to 3 yards each

2nd 28 bridges and trestlings varying in length from 12 to 60 yards ;

Abutments in masonry, metallic trusses of a total weight of 2,500,000 kilograms or 2,500 tons ;

Fences in barbed wire ;

The road is to be cleared of trees on each side, for a distance of 20 yards from the centre of the road bed ; 29 level crossings, 16 deviations from the straight line, 91 deviations of water courses have been allowed for.



Finally, after examining the line and boring holes in the ground to ascertain the nature of the soil, the following results, obtained as much by calculation as by experiment have been arrived at :

Cuttings.....	2,200,000 cubic yds.
Plaster, boulders, tufa and soft stone...	245,000 "
Hard rock.....	190,000 "
Total number of cubic yds.....	2,535,000

The above figures are absolutely correct and show that the works on that line exceed in difficulties of all kinds the work generally done on other Canadian railroads, and the price of tender is therefore not exorbitant.

The construction of the two lines mentioned under B and C would cost as follows : (Appendix I.)

1^o For the line from Sidney to Louisburg by the mines of the Reserve a total sum of \$581,991.

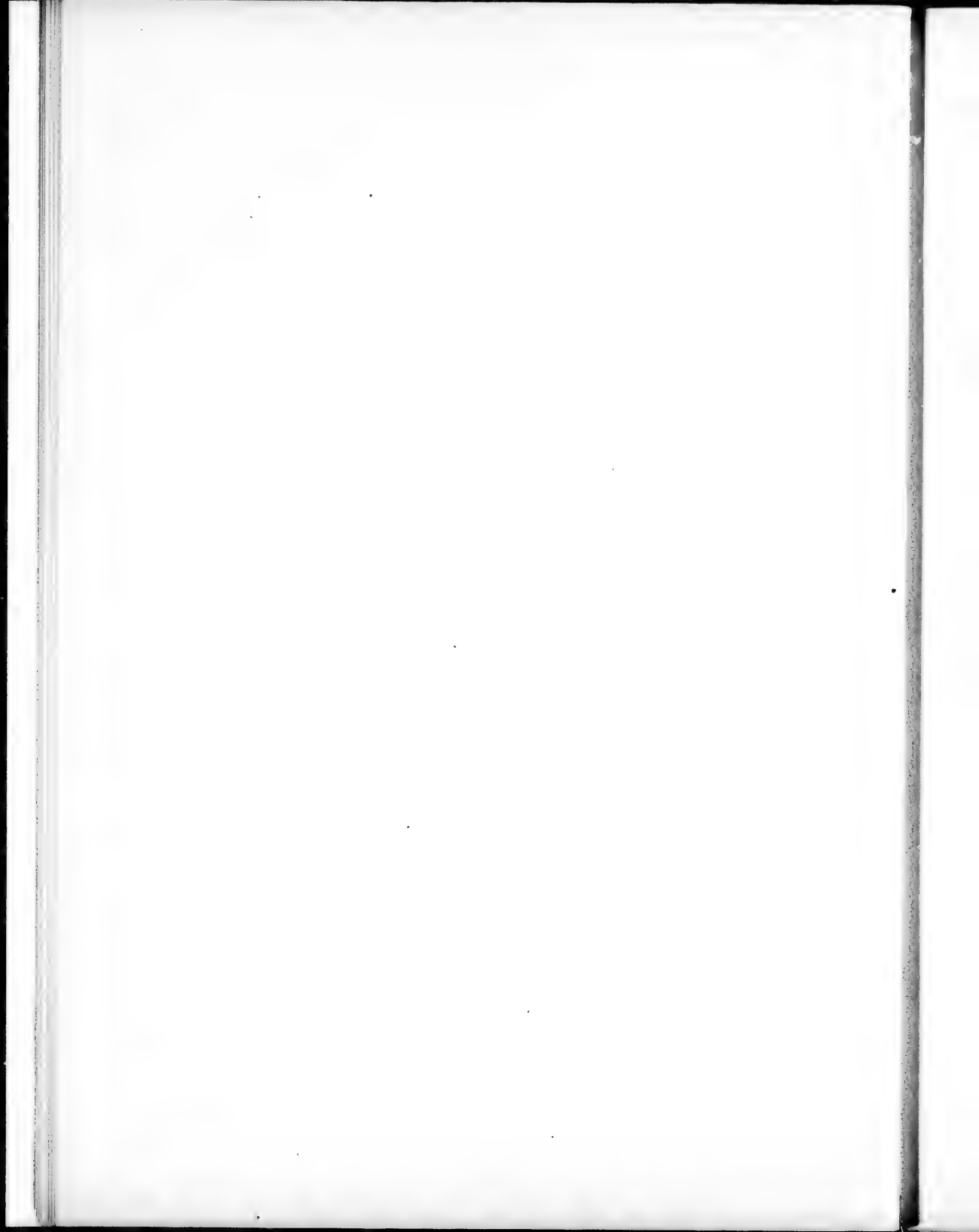
That is for the total of the 42 miles an average expenditure of \$13,857 (in making use of and widening the now existing road.)

2^o For the line from Oxford and Pugwash to Pictou, a sum of \$1,625,818 will be sufficient to finish it in taking into account the work already done by the Green Company.

With regard to the line mentioned under A, that from Moncton to Oxford or Pugwash, it is more convenient to wait until we know the intentions of the Government regarding the direction of the line, junction, etc., etc ; yet even in this case, the Syndicate is ready to tender for execution of the works.

After a careful examination by our engineers, of the territory, of the two lines mentioned under B and C with the view of obtaining as correct an idea of its present and future advantages, it is self evident that for the first years this traffic will not even cover the working expenses; there will be, for the line of Cape Breton, a deficit of \$25,000 per year, and for the line from Oxford to Pictou a deficit of \$20,000; viz : a total deficit for both lines of \$45,000 per year.

The future generations being called upon, in the natural course of time to profit of the many advantages deriving from this Railroad, it is but just and fair that they should shoulder to a certain extent the burden of its construction.



We have then proposed to the Government, should the construction of these lines or one of them be given to us, to accept instead of cash payments, annuities bearing 4 $\frac{1}{2}$ % interest and running over a stated period of years.

With regard to the amount of security to be deposited into your hands and as to the delay granted for the full execution of the works, we are ready in advance to submit to the Government's decision.

Ad. 2—RAIL WORKS.

As stated in the annexed proposal for an annual production of 40,000 tons, the cost of these works is estimated at \$1,500,000.

The capital is ready and the capitalists show a certain impatience at their funds remaining unproductive at a time when money can find ready investment.

Allow me, sir, to summarize the conditions of the proposals concerning these works:

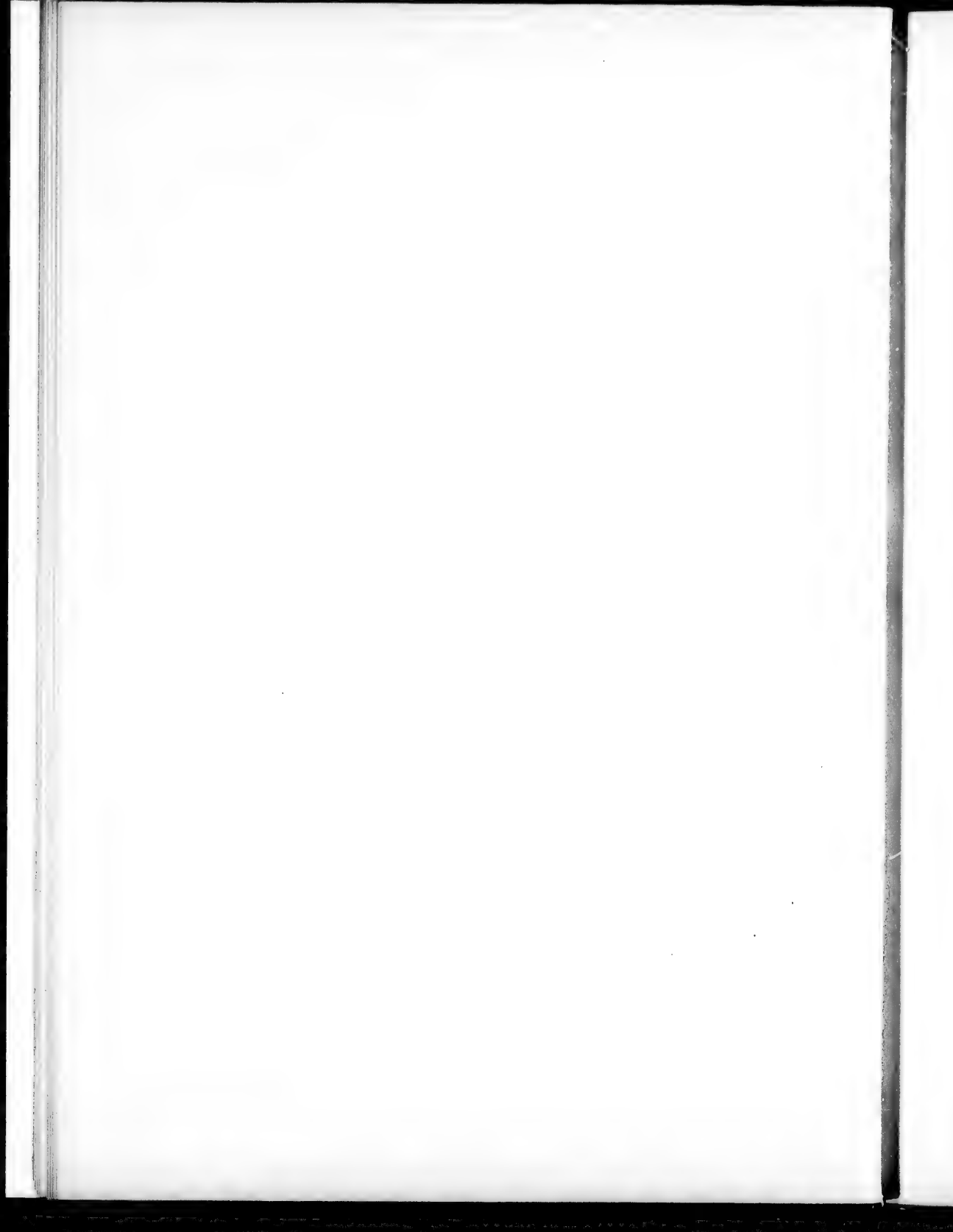
The output of 40,000 tons, must be taken as a minimum production.

As it is in the interest of the manufacturers to meet all demands, once the works are opened they will, if needed, increase their capacity for production.

It is evident, that the railway companies will object to the increase in the price of the rails; they will submit to this increase only with difficulty and may combine together in order to bring about the closing of the works; experience leads us to believe that such will be the case. For this most important reason we ask from the Government the guarantee of a minimum demand for a stated term of years. This, the Government can easily do, by giving rails instead of money when distributing subsidies to companies asking help. The Government can, also, require that in the future rails be furnished by Canadian manufacturers.

This system of protection has worked well in France, Italy and in Russia, and has, not only neutralized the opposition of those interested in the old *régime*, but has permitted of the establishment of large and important works.

A delay of four or five months, will be sufficient to enable our



engineers to examine on the spot and determine on the quality and in the productive power of the mines.

If the Government therefor accepts the principle, and the conditions which follow the same, the works can be commenced as early as the month of August of this year.

Again, with regard to the establishment of the Rail-works, I can affirm that MR. DE MONTGOLFIER, in order to secure experienced and skilled labor on which he can rely, intends to send at once, 500 skilled mechanics from Europe, who with their families, viz: from 12 to 1,500 colonists.

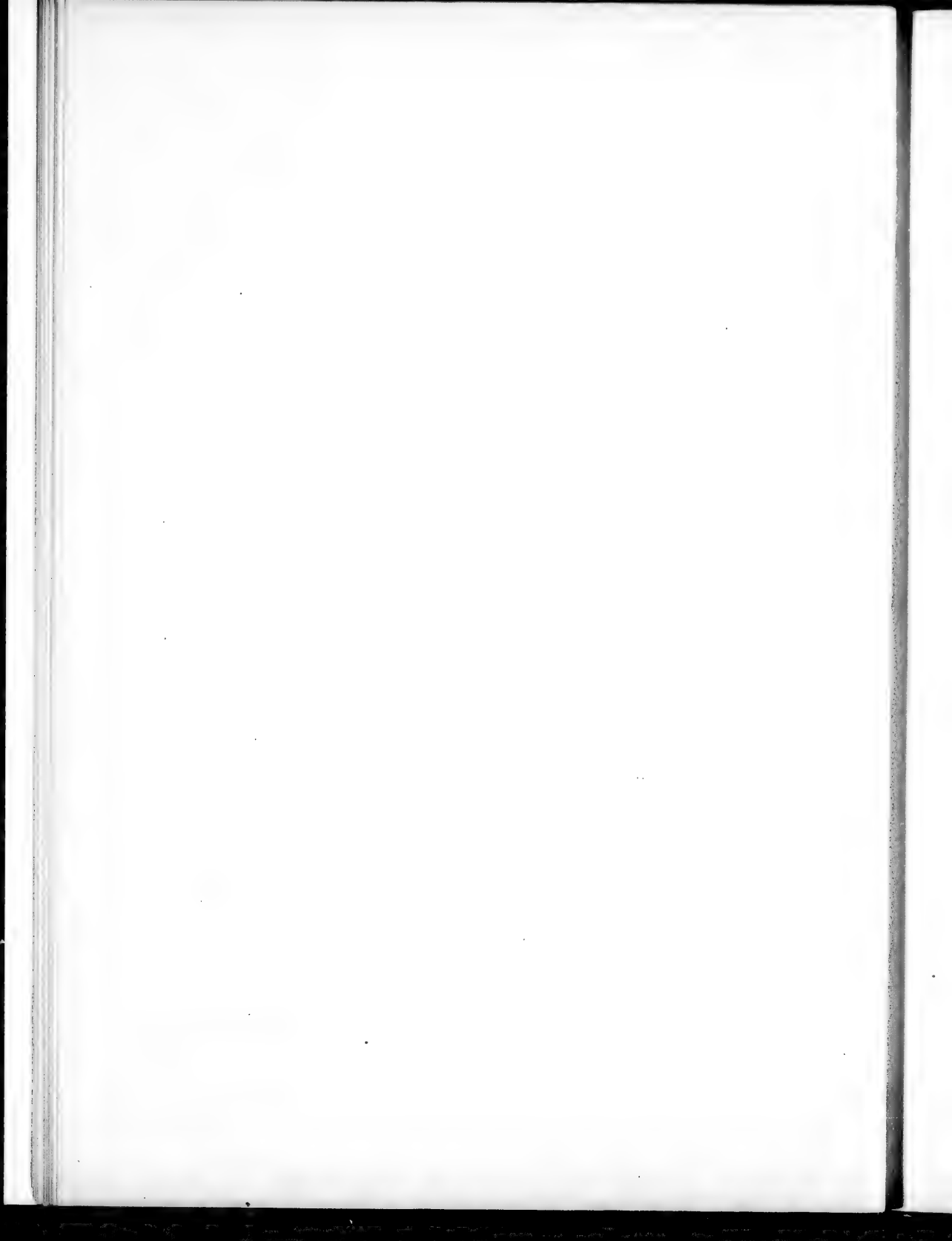
You will agree with us, sir, that it would be difficult to find a more practical mode of developing the mining industry of Nova Scotia, than the project we propose.

RUNNING OF THE GREAT EASTERN RAILWAY OF CANADA.

You will please remember, sir, that, during the month of September last, we sent, with your permission, the engineers, Messrs. LeBrun, de Montgolfier and Bailly, over the unexplored region, to examine thoroughly the working of the *Intercolonial*, also the cost of constructing the four lines above mentioned in Appendix No. I.

Mr. LeBrun, under whose direction the commission worked, concluded in his report, that the working of the *Intercolonial* offered difficulties of a complicated nature, especially on account of the lines to be constructed, and also because of its being threatened in its very existence by the construction of the Western Division of the Short Line (direct line from Moncton to Montreal through the State of Maine.) This objection presents a formidable *alea* of disadvantages, to be overcome only by granting the conditional proposals mentioned in the conclusion of his report, which I have the honor to remit to you. (*Vide* Appendix No. II)

All the conditions above mentioned, in regard to the eventual award (*concession éventuelle*), can be realized within a year; this delay having expired, the Syndicate is bound to ask for a definite award based upon the studies and surveys made during that year but the Government will always be at liberty to accept or refuse this definite



award (*concession définitive*) being the proper party to decide as to whether or not the proposals made are in the interest of the public.

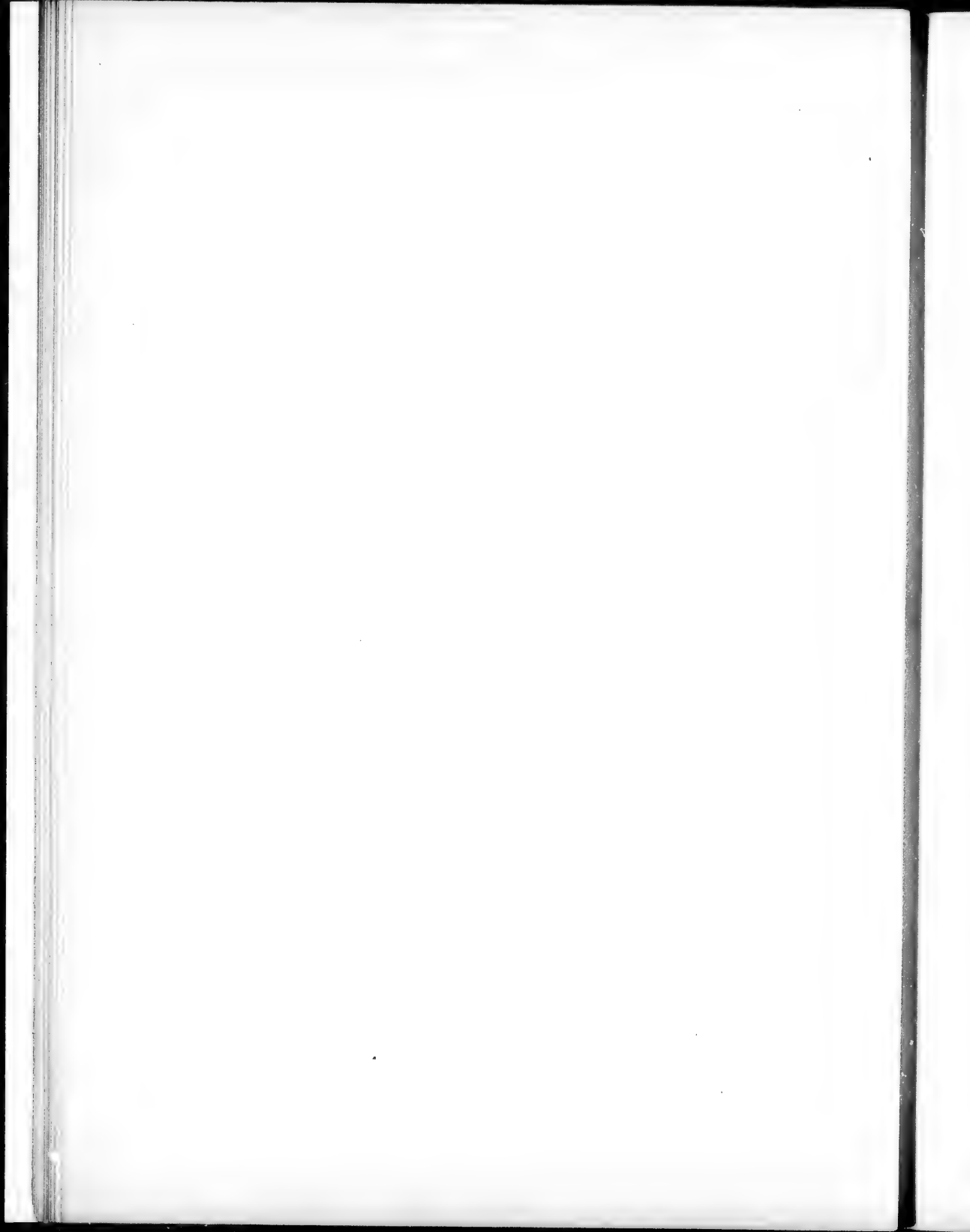
The delay of a year wanted for conditional award is otherwise necessary to complete the negotiations of purchase or amalgamation of the several lines, which will complete the *Great Eastern Railway of Canada* and which are under No. III of Appendix.

You will notice, Sir, that the mode of conditional awards which we offer and which is often adopted in Europe, especially in France, does not bind the Government to any obligations. It is always within the province of the Government to break off a provisional arrangement without incurring damages, whilst it gives the Syndicate, ample time to consider, study and digest the work confided to their care

This provisional award would give to the Syndicate sufficient and indispensable time to make all the special examination and surveys required either for the construction of the new lines or that of the Quebec bridge, and to consider and take into account the running of the existing lines ; it gives time also for the negotiations with the several Railway companies, which must be purchased or amalgamated in order to complete the *Great Eastern Railway* system. Finally this conditional proposal is necessary as a starting point to the financial combinations which the members composing our Syndicate must necessarily make, before launching in so great an enterprise. (VIDE *Post Scriptum*.)

Referring to this same subject of a provisional award, I wish, Sir, to call your attention to this other point : It is the co-operation of the ST. CHAMOND Co, assisted by first class banks, bankers and men of a large capital, under whose auspices the execution of the construction of the Eastern Division and the establishment of the Rail works is assured. It is by increasing the influence of this group of manufacturers, bankers and capitalists, that the creation of the *Great Eastern Railway of Canada* will become a *fait accompli*.

The Bank of Montreal will give you, Sir, all the information you may require as to the Financial strength of our Syndicate, with Mr. DE MONTGOLFIER and his friends at its head.



In case our proposals should meet with any objection, we greatly desire to receive from the Government the expression of its wishes, so that we may know how, and in what measure we can adjust the difficulties, if any in the way, and solve all questions upon which the Government and ourselves may be at variance.

Confident of the fact that in the future as in the past, I shall be honoured with your confidence.

I have the honour to be,

Sir,

Your obedient servant,

(Signed,) KAMPER.

Ottawa, 1st May 1887.



P. S.—The Syndicate is composed as follows :

COUNT DUCROS, Chief Engineer of the PONTS ET CHAUSSEES, Grand Officer of the LEGION OF HONOUR.

M. LE MARQUIS DE BEAUVOIR, Vice-President of the BANQUE DES PAYS AUTRO-HONGROIS, Commandeur of the LEGION OF HONOUR.

M. LE COMTE DE CHEVILLY.

M. MAXIME DESMAISONS, President of "LA SOCIÉTÉ DE NAVIGATION DES BATEAUX DE LA SEINE."

with the assistance of the "*Société des Hauts Fourneaux, Acieries et Forges pour la Marine et les Chemins de Fer* (Capital 20,000,000 fcs.)" Cie. de St. Chamond, General Manager, M. de MONTGOLFIER, and a *groupe* of the principal Banks of Paris.

LIN
FROM
SIDN
TO
LOUISB
BY TH
ies of the

Lit

Ear

Trac

Fene
Stat
Sunc

Exp

APPENDIX I.

LINE
FROM
SIDNEY
TO
LOUISBURG

BY THE

Reserve.

Line work

Earth work.

Track.

Fences, Tel.,
Stations,
Sundries.

Expenditure at
Louisburg.

This is a narrow gauge road, and should be changed to the same gauge as the new road from Sidney to Hawkesbury It is 42 miles long (68^k.078.)

From Sidney to the mines.....26 miles

“ the Mines to Louisburg.....16 “

The latter part has been abandoned since four years. The repairs to the line would comprise :

With the exception of the loading wharves of Sidney and Louisburg, the iron bridge over the Mira river; and the large wooden trestle works over certain valleys, *all* the other line works would have to be rebuilt; namely : those of less than 20 feet in wood and masonry, those of more than 20 feet in masonry with metal trusses.

The first number.... 41

“ latter “ 18

The gauge is only 0.^m96; it will have to be enlarged to 1^m47.

As a consequence the cuttings will also have to be enlarged; the crossing of Catalogue lake would require to be stone'd on both sides All the level crossings will require to be rebuilt.

One-third of the rails will have to be replaced by others of steel of 56 lbs per yard; all the sleepers will have to be renewed.

One-third of the ballast, 43,500 cubic metres will have to be renewed.

Repairs to one-third of the portions still existing

Cleaning of the line, of the ditches and cutting of the ditches.

The work of rebuilding the line over a distance of about 1 mile.

The whole work would cost :

Levelling and draining.....	\$246,870
Line works, culverts, etc	92,534
The track	172,888
Fence, telegraph line and station	13,000
Sundries	17,699
Expenditure at Louisburg to form a connection with the wharf.....	39,000
	\$581,991

Or for 42 miles, an average cost of \$13857 per mile.

LI
o
ord &
PIC

LINE

15

OF
Oxford & Pugwash
TO
PICTOU.

Let us suppose this road to follow the line upon which the Green Co. has done some work, and to leave it at a certain point to connect with a road built by the Government running directly to Pictou, which is already connected with New Glasgow.

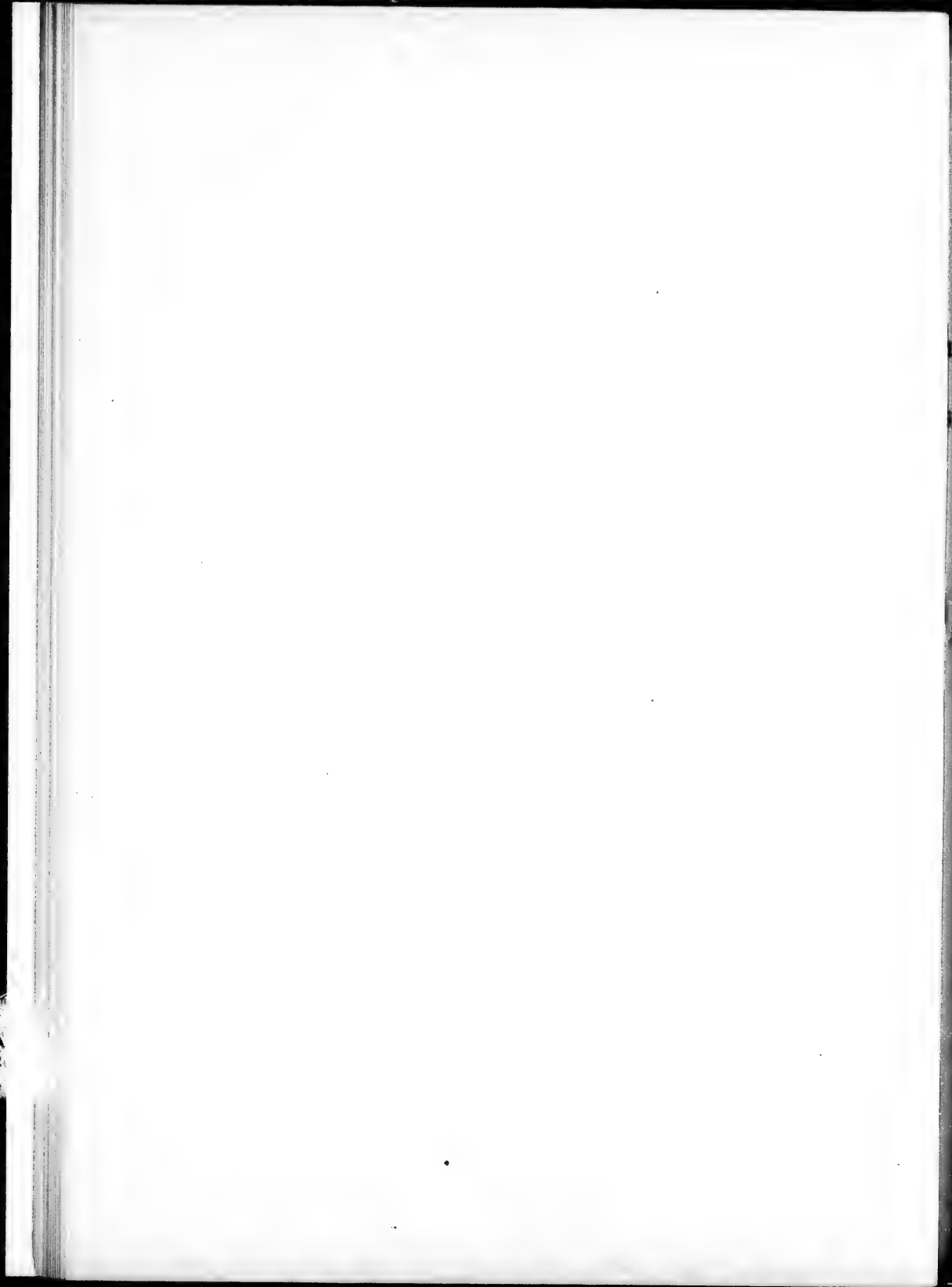
The portion to be built whether the work of the Green Co be utilized, or whether the road be built over new grounds shews a distance of 66 miles.

Earth work.	The levelling, clearing and changing of water-courses would cost.....	\$740,327
Line work.	What remains to be built of these may be estimated at	385,000
Track.	Rails, 65 lbs per yard.....	445,491
Stations, &c.	Station, Fences and Telegraph Lines.....	27,500
Unforeseen Expenses.	Unforeseen expenses.....	27,500
	Average per mile	\$1,625,818

Average per mile

To complete the means of communication by railway to the Eastern extremity of Cape Breton it would be necessary to add to the cost of the Sidney line, the cost from Sidney to Louisburg...
From Oxford to Pictou....

Total \$2,208,000



APPENDIX II.

To

REPORT

OF

M. R. Lebrun

Civil Engineer

TO THE

SYNDICATE

COUNT DUCROS,

Engineer-in-Chief of the PONTS ET CHAUSSEES,

Grand Officer of the LEGION OF HONOUR, &c., &c., &c.,

PARIS

SIR,

You wish me to furnish you with the conclusions of the Report of my mission to Canada; I hasten to do so, awaiting the moment when I shall be prepared to give you the Report itself.

This mission with which you honoured me, consisted :

1. In a careful examination and study of the new lines to be constructed either in Cape Breton Island or on the coast between Moncton or New Glasgow to Picton by the sea shore.

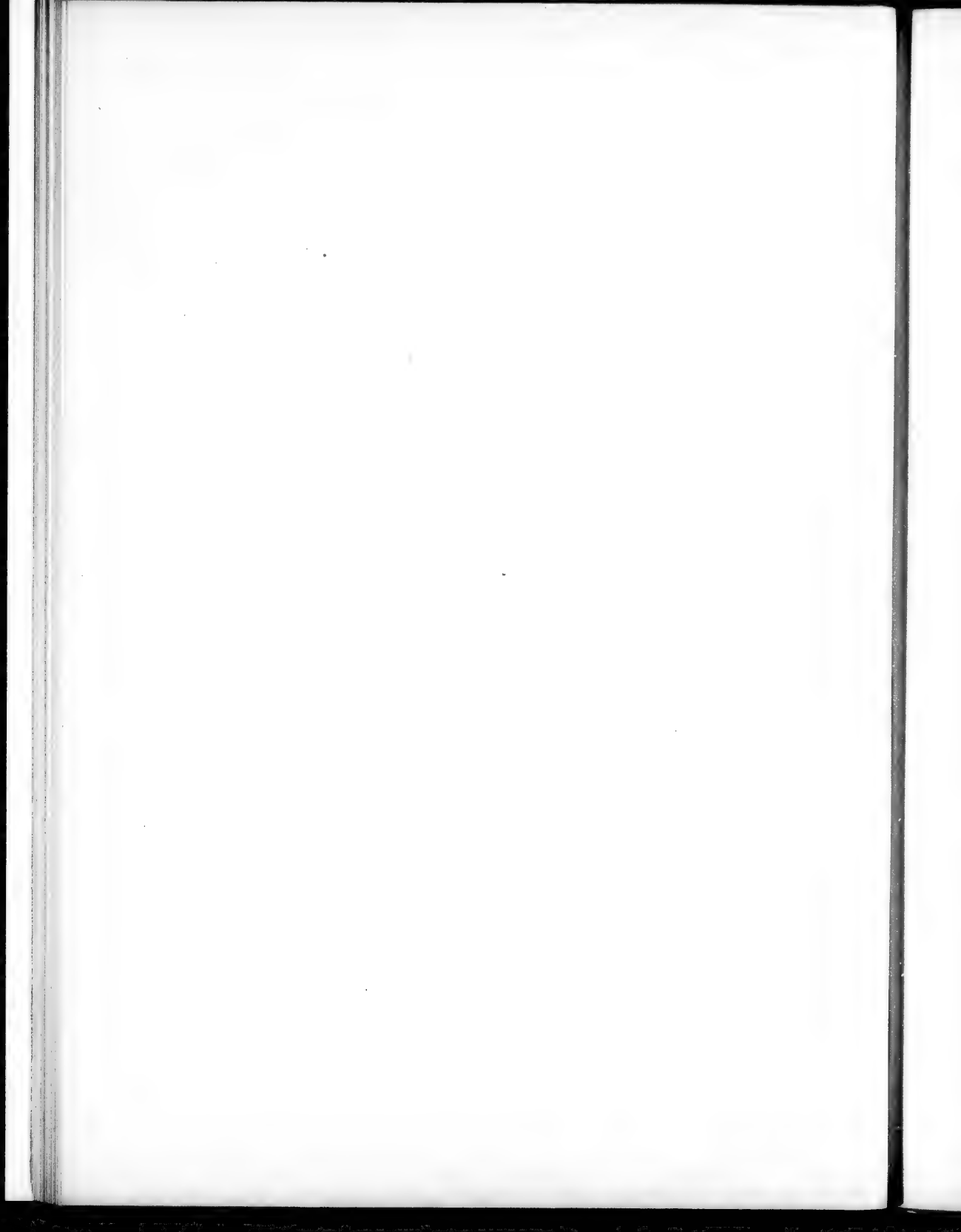
2. The study of the Port of Louisburg.

3. The study of the management and running condition of the *Intercolonial Railway of Canada*.

Your object in obtaining the above information was to determine the basis of a project embodying the conditions upon which concessions could be asked from the Canadian Government allowing the construction and proper working of the above mentioned lines.

In the course of my mission I was struck with the difficulties in store for the system comprising these new lines, when the direct line between Montreal and Moncton granted to the Canadian Pacific Railway co'y will be completed and I have thought it my duty, in consequence, to offer to your consideration fresh combinations which would secure a more direct traffic between Nova Scotia and New Brunswick and the region lying North of the St. Lawrence, thus establishing a new channel of exportation to the valuable mineral resources of these Provinces.

These combinations, if ever carried out would, I feel satisfied, respond to the wishes and requirements of both the Federal and Provincial Governments.



You have been kind enough to approve of this novel idea and I have tried to give it full development in the Report which I am now engaged in preparing, the conclusions I now beg to submit to your approval.

I

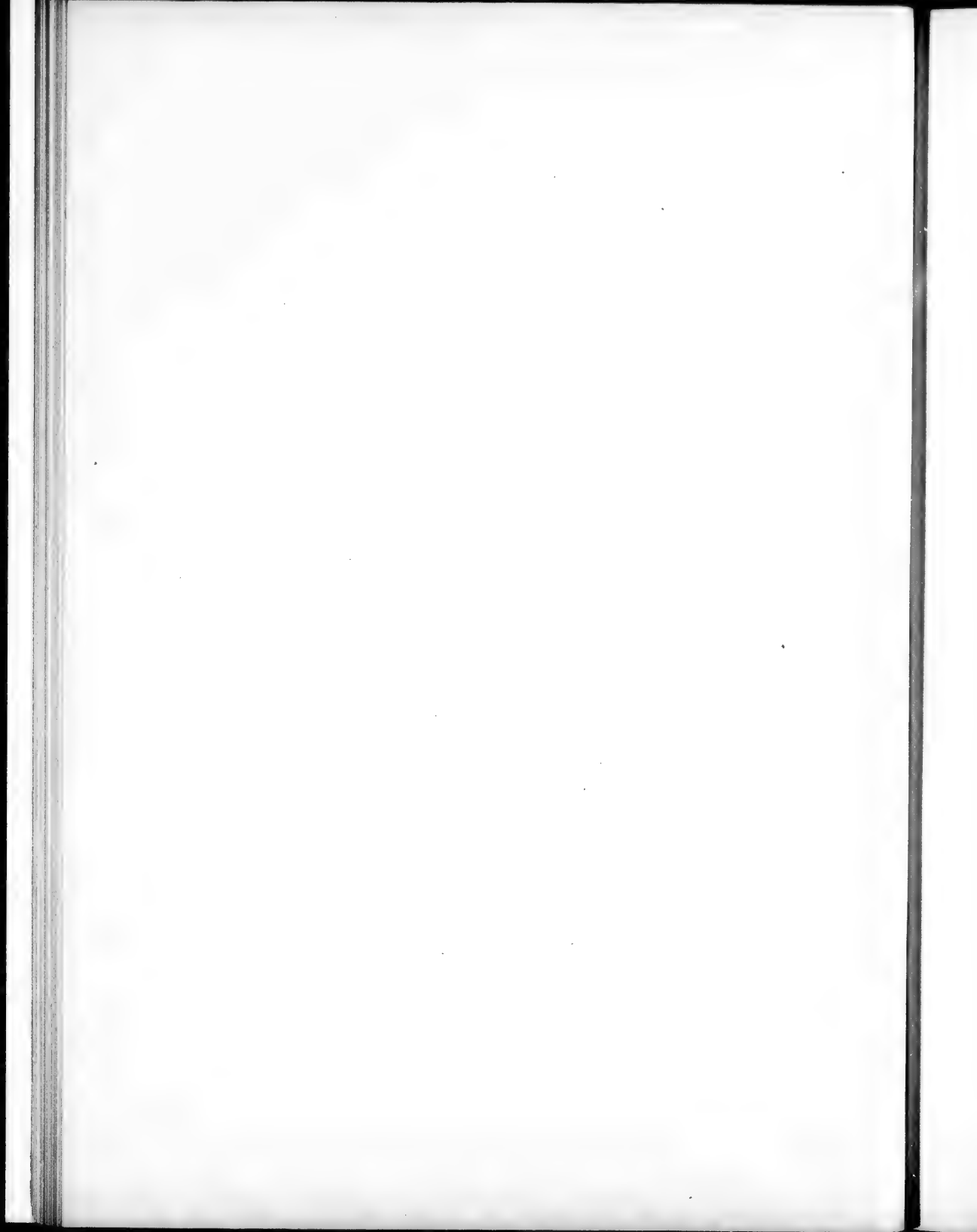
CONSTRUCTION OF THE NEW LINES.

A—LINE OF CAPE BRETON.

The course followed by this line, which was traced by the Government, commences at Hawkesbury upon the Straits of Canso, opposite Port Mulgrave, terminus of the *Intercolonial*, crosses the Grand-Narrows, follows the East Bay from Bras-d'Or, and terminates at the city of South Sydney. This course which was adopted to give satisfaction to the most influential portion of the population of Cape Breton, crosses the most populated and prosperous part of the Island, but it presents the double inconvenience of requiring a transshipment at Grand-Narrows and offers a very imperfect service to Louisburg. Following the Bras d'Or in nearly all its length, the line will always have to compete with navigation during the summer season.

I believe that the survey by Loch Lhomond, branching off at Mira River to Sydney, on one side, and Louisburg on the other, would have remedied to these objections and lessened considerably working expenses. Crossing an agricultural and mineral region, devoid of means of communication, this latter course would, in our opinion, favour more practically the colonisation of Richmond and Cape Breton.

The traffic of the Island which, on account of the ice can be depended upon only in summer, consists in lumber, the Sydney coals and the Fisheries. The passage through the Straits of Canso being open in all seasons by means of a ferry specially built for the purpose, the line would be in constant communication with the continent, whereas the crossing at the Grand-Narrows would be closed at intervals or offer difficulties until a bridge was constructed to keep the line opened all the year around.



Apart from the lumber, the other branches of traffic are destined to a vast development ; numerous and important mines of copper and iron could be worked all the year around, the fisheries would develop considerably and by its natural position the port of Louisburg, being opened to navigation all the year, Cape Breton would reconquer its original importance and become, as under the French, over a century ago, the great market for fisheries of the Gulf St. Lawrence and Newfoundland.

This development would be hindered somewhat by the difficulty of crossing the Grand Narrows in winter.

The population, although on the increase, does not develop in proportion with other countries less favored by the climate, on account of the isolation of the island ; the impetus to industry which will follow the construction of the railway will bring new colonists, but it must be acknowledged that in its present condition, the resources of the country will fail to meet the working expenses of the railway.

If we take as a comparison, Prince Edward's Island, the population of which exceeds that of Cape Breton (51.10 inhabitants per square mile, against 25.80 only in Cape Breton), we can calculate at once upon the following results during 1884-1885.

Total Receipts	\$158,188	thus per mile.....	\$752
" Expenses.....	<u>211,207</u>	" " "	<u>1000</u>
Deficit	<u>52,619</u>	" " "	<u>248</u>

We cannot therefore hope for a better result in Cape Breton during the first years, nor until the mines are fully developed. We must also consider that, by its configuration, half of the surface of the Island, and more than half of its population, will not contribute to the railway.

If the Coal can be worked at \$1.00 cheaper than that of New Glasgow upon a tariff of \$0.008 (o.f. 0.25 per kilomètre), per mile, which will hardly remunerate for the two crossings of Grand-Narrows and of Canso, we find only 125 miles, a less distance than that from Sydney to New Glasgow. A great development in the transportation of coal cannot, under these circumstances, be expected.

An annual loss, during the first years, of \$300 per mile, or for the entire line of \$25,000 to \$30,000 must be expected.



B—PICTOU—OXFORD LINE.

What we have said of the Cape Breton line can be applied to the line from Moncton or Oxford to Pictou. If the country is better cultivated, or if the population is greater than at Cape Breton, excepting Pictou, the industry is *nil*; the line, it is true, being shorter than that of the *Intercolonial*, will monopolize the work, but as it will be at the expense of the main line, we cannot count this traffic in the valuation of the receipts for the whole system.

The loss shall thus be equal to that of Cape Breton, for the whole line, viz : about \$20,000

The new line will burden, for several years, the working of the system, with an expenditure of \$45,000 to \$50,000.

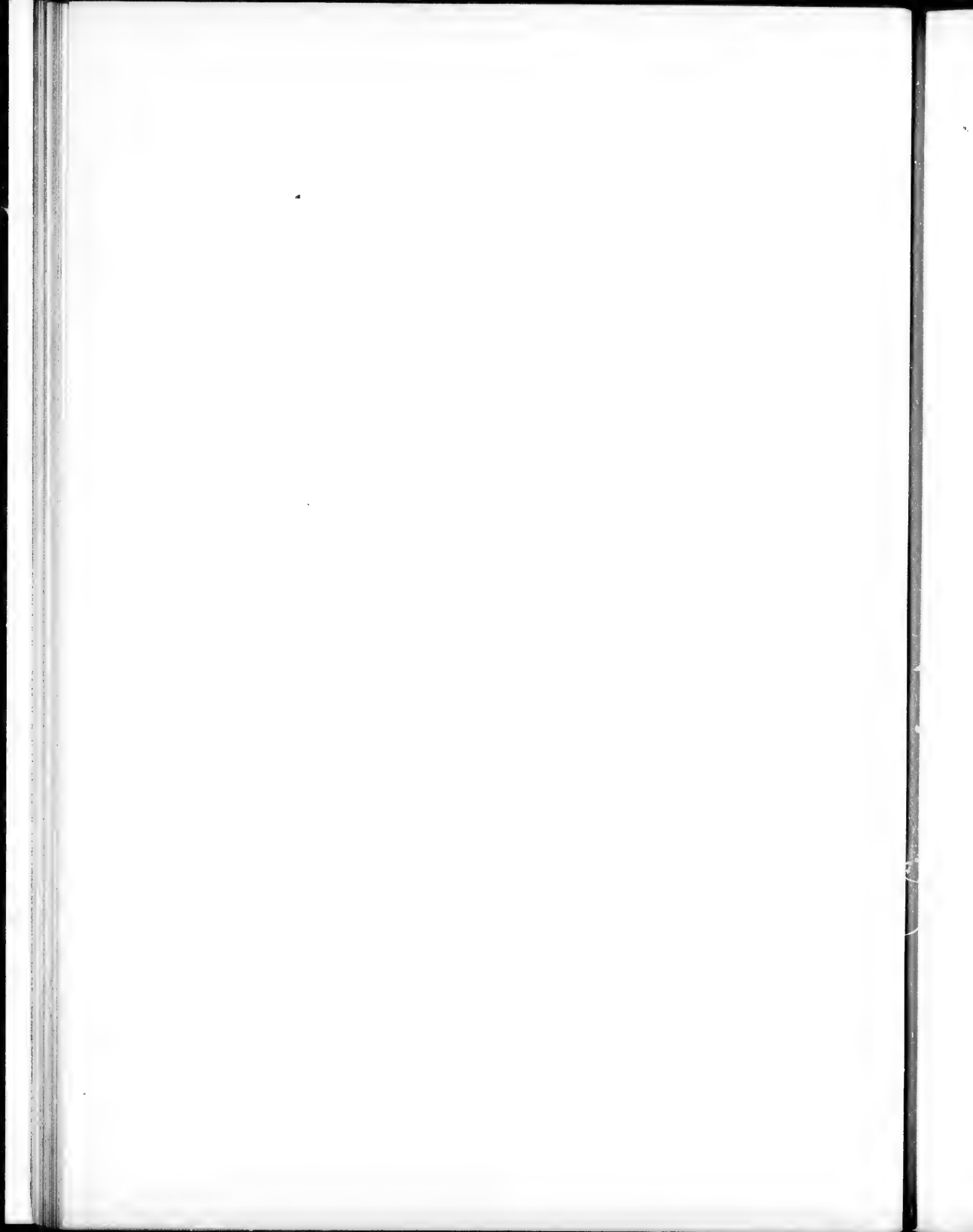
II

PORT OF LOUISBURG.

The detailed study of the port of Louisburg which I have had the honor to submit to you tends to show that, with the exception of a few days, in the spring, during the moving of the ice, the port is always free and accessible to steamers.

This port put into permanent communication with the continent can rapidly become the general market for Newfoundland and the fisheries of the Gulf St. Lawrence. At this present moment the American Fisheries, in order to hold longer to their stations, come into Pictou and in the Strait of Canso to forward their cargo to the United States ports, either by railway or boat and to renew their supplies in provisions and bait.

If, as it is desirable, the fisheries question is resolved in a liberal manner, the Canadian Government can, in benefiting by the restrictions which the Newfoundland parliament wants to impose upon this trade, secure for itself the monopoly, at Cape Breton, of all that concerns the fishing industry and give to that country a considerable development. In fact, it must not be forgotten that South of Newfoundland, between Cape Ray and Cape Race, fishing is practicable



and very profitable even during winter, and that Louisburg is the only port easy of access in all this region during that season when fishermen can obtain provisions or a refuge in case of peril.

Louisburg can, for the same reasons, become the terminus on this side of the Atlantic of the Ocean steamers; the distance from this port to Europe being from 900 to 1000 miles shorter than from New York, viz: about sixty hours; but it is only by the effluxion of time that these steamers will be induced to come. The management of this port requires special improvements which cannot be advantageously made at this moment, they would, in fact, be premature if proposed before the railway question is solved.

I will therefore confine myself for the moment to point out to you, as I have already done, what work can be done and draw your attention to the necessity of bringing back the coal to Louisburg from Sydney during winter. The reasons which I have been given for the interruption of this business could easily be removed.

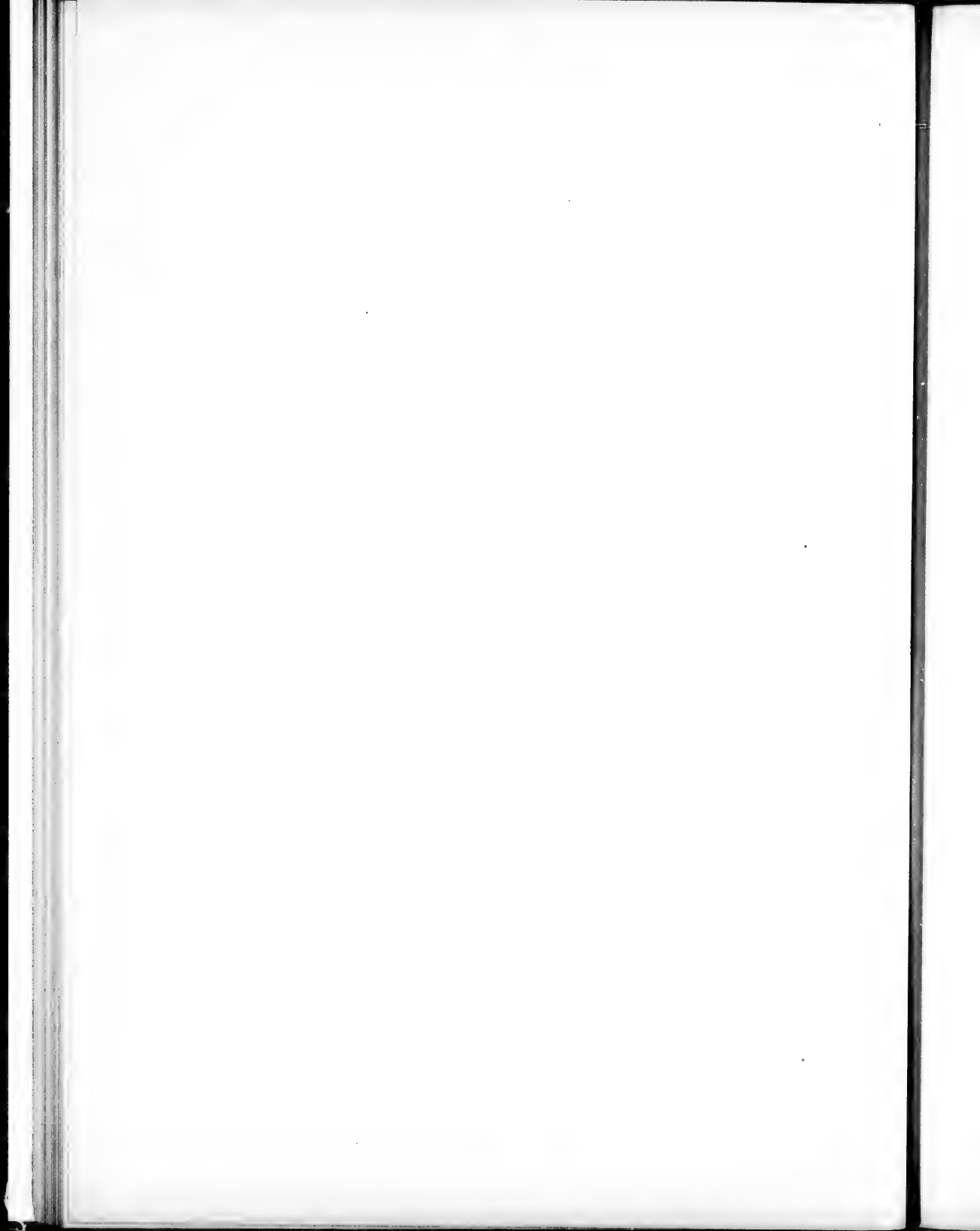
As a conclusion to my observations on this point, I think that we can confine ourselves, for the moment, to bring to Louisburg the coal traffic during winter and to construct in this port such buildings and make such improvements as will make it a great market for fish

During the construction of the railway, surveys can be completed and all the necessary arrangements can be made with navigation companies, in order to obtain that their steamers come to Louisburg on their ordinary voyages to Europe.

III

INTERCOLONIAL RAILWAY SYSTEM.

The *Intercolonial* Railway, in a traffic point of view, is divided into sections of a very unequal value, the most profitable being the one located between St. John, Moncton, Halifax; the most valueless is the one designated under the name of "*Eastern Extension*," located between New Glasgow and Port Mulgrave.



The last statement shewing receipts and expenditure are consigned in the following table :

YEARS.	Number of Miles in working order.	RECEIPTS.		EXPENDITURE.		DEFICIT or GAIN.	
		Total.	Per Mile.	Total.	Per Mile.	Total.	Per Mile.
1883-1884	840	2,353,647	2800	2,344,579	2791	+ 9,068	
1884-1885	861	2,368,154	2752	2,411,478	2836	- 73,324	- 84
1885-1886	861	2,383,296	2767	2,489,244	2890	-106,043	-123

If we compare these figures with those of other Canadian or American lines, doing an equal amount of business, one is struck with the high rate of expenditure.

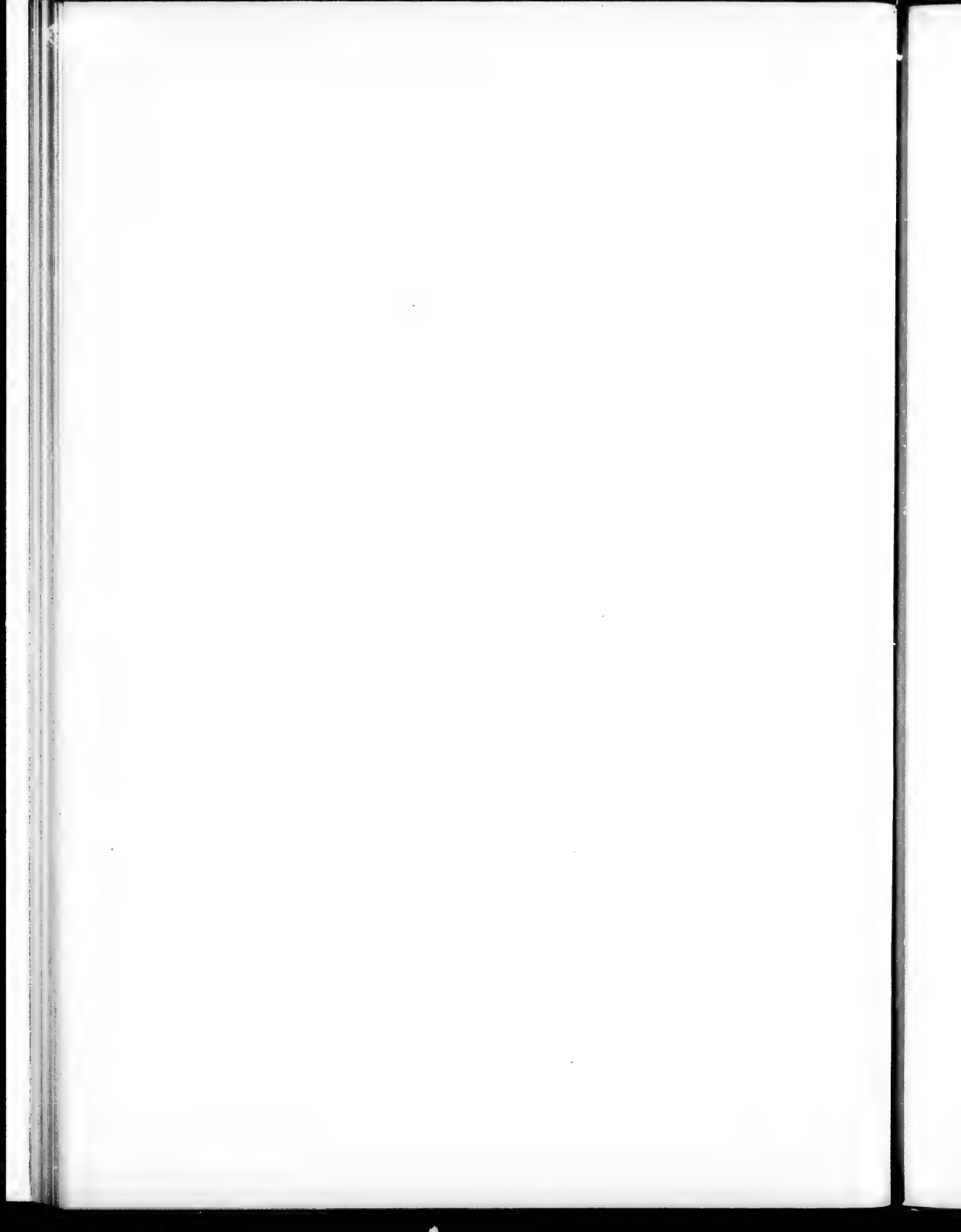
The principal cause of this trouble is to be found in the unprecedented lowness of tariffs which the government grants to traders in the Eastern provinces. Even admitting a very large tonnage, the rates are not calculated to cover the working expenses.

Economy could probably be introduced, in locomotive power by utilizing to a better advantage the loading of trains, and by reducing their number, which, under the pressure exercised over the management by the people have been too largely increased upon certain sections.

Lastly, a company reducing the expenses as much as possible, and capable of commanding more work from its staff could reduce considerably the working expenses.

But the fact is not to be concealed that it is due to the insufficiency of the tariff if the budget of expenses is so crippled ; in the hands of a company which cannot afford to work at a loss, it will be necessary to raise the tariffs. If, in certain cases, it was advantageous to carry goods under cost price, either for the purpose of developing a certain industry, or to utilize the return of empty cars, it would however be preferable to renounce to a traffic, whatever might be its importance, if it only shows a dead loss.

It is also to be considered if in raising the tariffs, in order to make them productive, we will not diminish greatly the receipts ; I



have not yet been able to find an answer to this complicated question, rendered more so, by the competition from navigation.

However, by the calculations which will be found in the report, based upon comparisons either with neighboring companies, or commercial information, I think that we could arrive at a

receipt of.....	\$2,000,000
and reduce the expenditure at a figure of	1,800,000

Leaving a net gain of.....	\$200,000
----------------------------	-----------

Should be deducted :

Annual deficit of Eastern extension.....	\$5,223	
Probable deficit of Cape Breton line and New		
Glasgow, Oxford.....	45,000	50,223
Leaving a balance		149,777
or in round numbers	150,000	

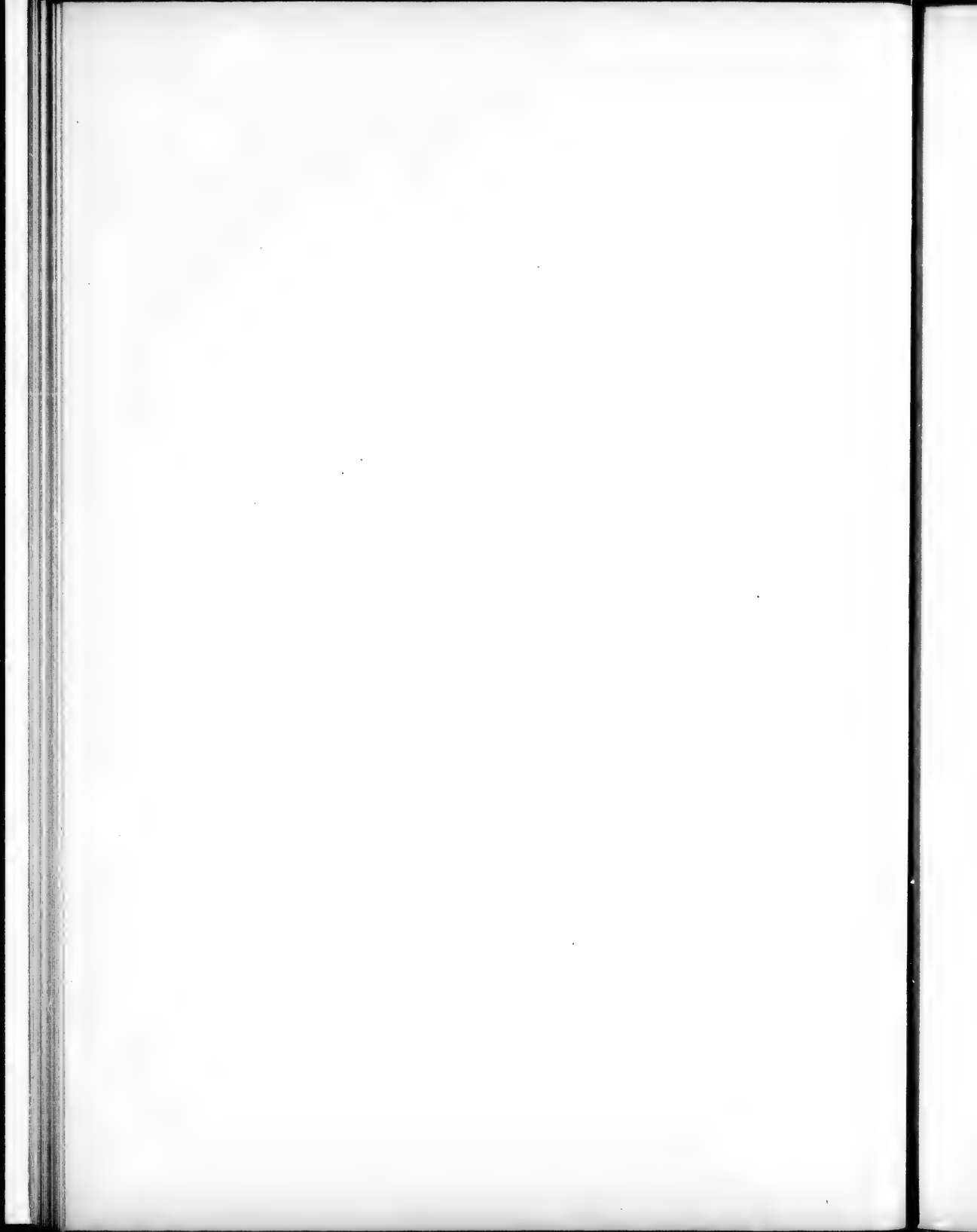
This would be the net income upon which *if things did not change*, after the completion of the new lines and in capitalizing a rate to be agreed upon, the actual value of the *Intercolonial* could be determined.

But the problem is far from being as simple as it appears to be. Several lines belonging to other companies are in course of construction around and near the *Intercolonial*; if they bring any traffic to it, it is to be feared that they will carry away from it more tonnage than they will bring in return. In first instance, we must consider that the *Canadian Pacific*, by its line from Montreal to Moncton, which is much shorter than the *Intercolonial*, will undoubtedly command all the general traffic from Halifax, St. John to Montreal, taking at the same time most of the local traffic between Moncton and Miramichi.

The Northern and Western line of New Brunswick will also, by way of Fredericton, Edmonston, Rivière du Loup, and so far as Quebec, remove most of the freight presently carried by the *Intercolonial*.

What will be the ultimate result of the construction of these lines?

It is impossible to say so long as the system of the ruinous competition which seems to be prevailing with Canadian and American



companies is being carried on, while with the disadvantage of its great mileage, the *Intercolonial* will not be able to compete with advantage and will eventually be condemned to struggle painfully, receiving but a small local traffic which will develop slowly and only as the work of colonisation progresses.

It is true that a few of those lines in construction, that of Gaspé for example, will be as many tributaries which may constitute in the end a net gain, but that country is as yet very thinly populated and will take a long time to develop itself; this consideration therefore is, of an uncertain character.

It is difficult indeed to establish the value of the *Intercolonial*, the information received being essentially of a complex, uncertain and contradictory nature; constituted as it is at present, its value may be considered as null from the moment the *Pacific* will have completed its direct line.

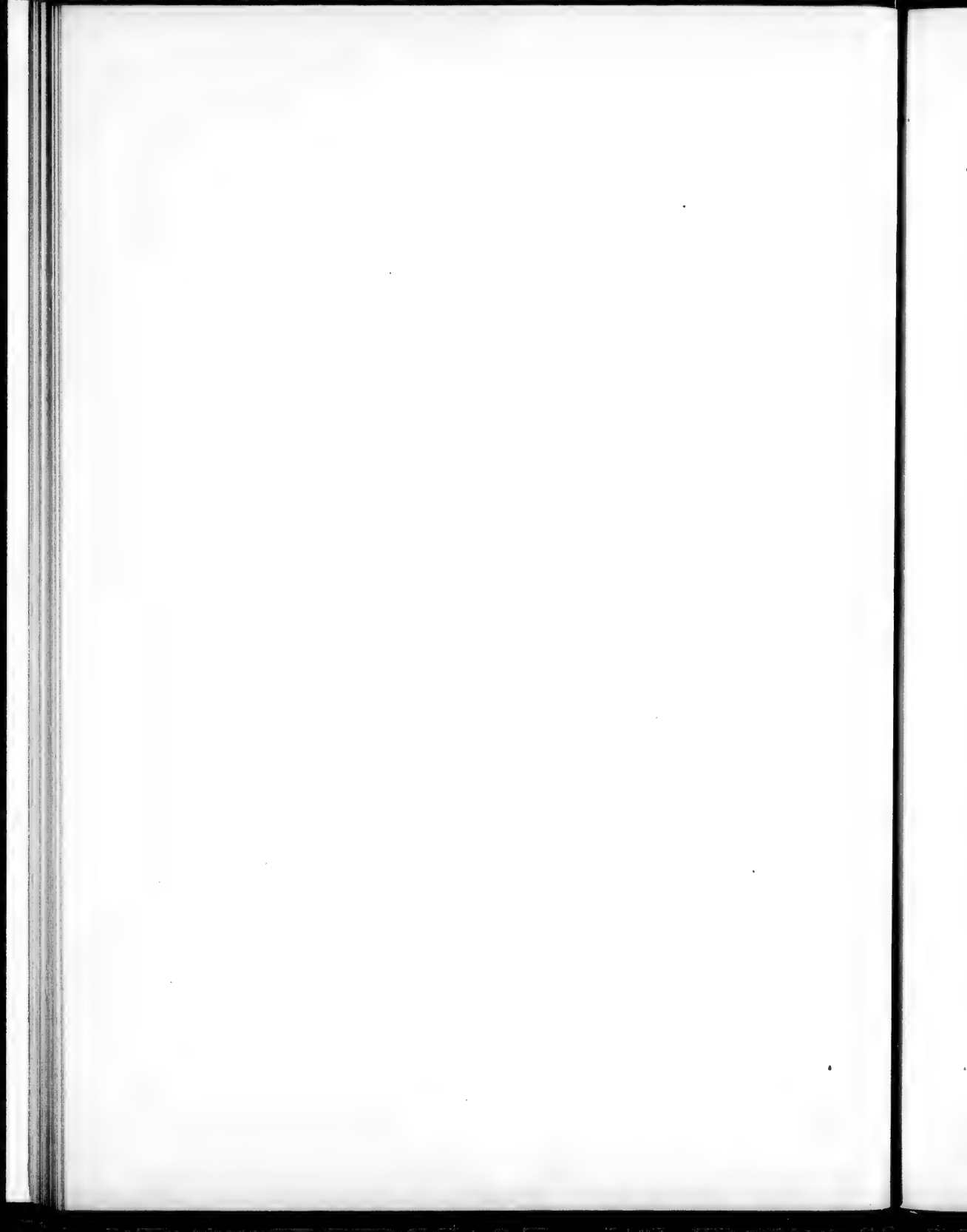
IV

TRANSFORMATION OF THE SYSTEM.

The situation, rather gloomy, changes if we modify the system in establishing new lines, either by way of coalition or by way of direct concession.

The province of Nova Scotia and New Brunswick, are very rich in coal and mines of all kind, we can therefore predict that they will become by their practical development the centre of a great industrial market, possessing as they do two ports of Canada on the Atlantic which are accessible all the year around, the ice on the St. Lawrence, interrupting all communication between the two shores for five months in the year, and making them tedious and difficult during the summer season.

It is then only natural that if the traffic of those provinces to Montreal is to go through the Pacific Company, it will become imperative for us in order to secure the traffic to Quebec and the north of the St. Lawrence to possess as direct a line as possible, and to unite the two shores by erecting a bridge between Point Levis and Quebec.

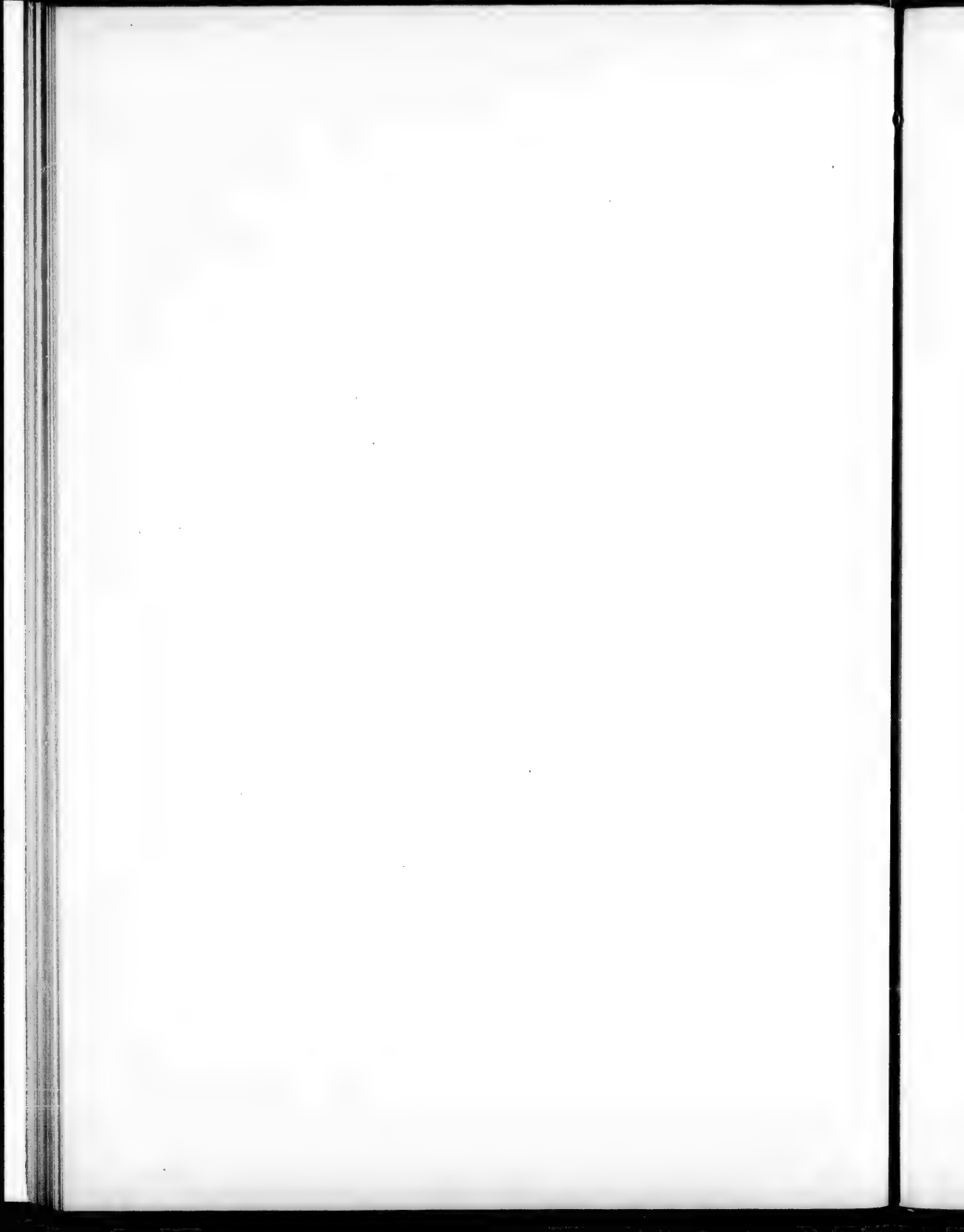


We would thus constitute a system bringing in direct communication three provinces, the resources of which are called to a great future. The natural traffic of this Line would be large enough to permit its owners to compete with other powerful companies.

It would be preferable to connect the existing lines in completing them by a few branch lines, we would thus gain time, reduce the amount of invested capital and avoid ruinous and fruitless struggles. I think that it would not be desirable to agree to a direct purchase unless the lines which we need refused (in spite of their interest to do so) to enter into these combinations. We feel satisfied they will accept to join us. They, in fact, at present are barely paying their working expenses and their obligations, competition would lessen their receipts, while an understanding as we suggest in increasing their traffic would greatly improve their financial condition.

What will be the portion of traffic between this system which we may call the *Great Eastern Railway of Canada* and the *Canadian Pacific*.

We have already said that this latter company would take possession of the direct traffic from Halifax and St. John to Montreal, and that the new company would have the traffic to Quebec and the North Shore of the St. Lawrence. The construction of the bridge will secure an increase of traffic, whilst the projected shortening will permit by a rapid communication with the internal navigation of the river at Point Levis, a new source of revenue. Owing unfortunately to want of time and having but at the last hour thought of these new combinations, I have not been able to gather all the information regarding the elements of the traffic which we may reasonably expect, but even with the incomplete knowledge which I now possess, and which is embodied in my report, *we can consider as certain that the projected system will in the beginning, pay largely its expenses and the obligations of the lines already constructed; we can even safely look to a premium on the stock, considering that these lines, combined as above mentioned will materially benefit by the development of the country and its natural resources.*



V

THE BRIDGE AT QUEBEC.

The two plans which, to your knowledge, have been made to cross the St. Lawrence below Montreal, have been studied at *Cape Rouge*, a few miles above Quebec.

They both consist of a bridge on the "*Cantilever*" bridge system with a central truss of 400 yards (*mètres*.)

The plan, which I have had the honor to submit you, of a bridge with spans of 150 to 200 yards (*mètres*), sunk in 35 yards of water between the City of Quebec and Point Levis, will, we think, render much greater service by bringing into direct communication the following terminus-stations of the following systems:

On the North Shore, The *North Shore line* and *Lake St. John's line*.

On the South Shore. The *Grand Trunk*, the *Quebec Central* and the *Intercolonial*.

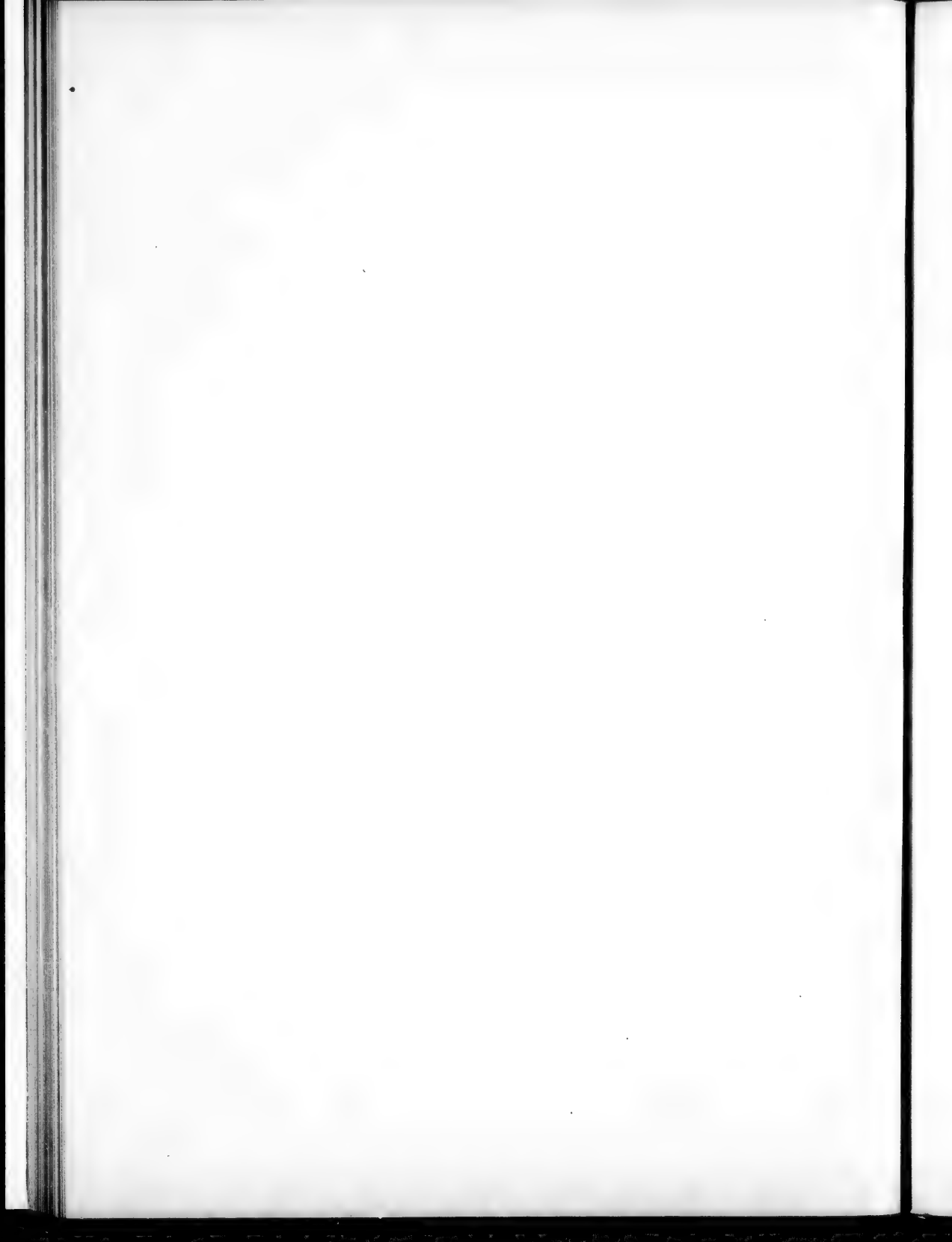
The great height of the beams would permit the laying of a double track, one for the Railway, the other for vehicles and a tramway.

The rocky nature of the bottom of the river will permit in adopting this system, to make the foundation solid.

The specifications made for the plans of Cape Rouge vary between 4 and 7 millions of dollars. My plan is not far enough advanced in its details to give you the exact figure of its cost, but I think I am justified in stating at this present moment, that the expenses, comprising the expropriations and connection with the several depots on both sides of the river will range between the two above amounts.

I have had the confirmation of my previsions in the publication lately made by the *Scientific American* of an analogous plan upon the Hudson river at Poughkeepsie, between New York and Albany.

The bridge is composed of spans of 150 yards sunk at 37.50^m under high water mark; it has been studied by the Union Bridge Co'y under conditions of details different from those adopted in France, but



the general information coincides remarkably with the plan which I have begun to study.

In conclusion, Sir, I wish to state that the new system, established upon the basis which I have just submitted to your approval—in affording a great impetus to the Trade and Commerce of the Eastern portion of the Dominion of Canada,—will also prove a profitable investment and is worthy of the most careful attention.

The unforeseen difficulties, however, cannot be defined in a precise manner with the documents and information I have gathered during my ten weeks' sojourn in Canada—and even if this could be done, — I believe it would be advisable to await the result of negotiations with companies already existing, feel their pulse and ascertain the terms upon which an arrangement, of a mutual benefit, could be arrived at.

So soon as we are furnished with this information, it will be easy to prepare an estimate of the probable expenditure, the net results to be expected and also the amount of capital required to do the work, *but I am prepared to day with the information in my possession to affirm that I consider the success of the enterprise fully assured.*

I am, Sir,

Your most obedient servant,

(Signed,)

R. LEBRUN.

Paris, 15th February, 1887.

APPENDIX III.

A System of Railways forming with the Intercolonial, the Great Eastern Railway of Canada.

The *Intercolonial* with its Branches and extensions towards the East, over a length of 1051 miles (1682 kilomètres) could be used as the nucleus of a system of railways communicating with the North, Centre and West of Canada and with the Eastern Extreme Ports on the Atlantic.

This system of railways would comprise :

1. The North Shore Line, from Montreal to Quebec, length.....	Miles.	Kilomètres
	209	334.40

This line belongs to the *Canadian Pacific Co.*, since three years and would have to be bought from this Company.

The *Canadian Pacific Co.*, according to reliable information would likely offer no material objection to its lease or sale.

2. The New Brunswick, Northern and Western R. W.

This line is not yet finished, total length.	97	955.20
---	----	--------

This line which will have its terminus at Chatham harbour on the straits of Northumberland, would become by amalgamation with the *Intercolonial* a producing power of the new Railway system, instead of being as it is at present, by its isolation, a rival of the *Intercolonial*.

The sum necessary to complete this line may be estimated at \$500,000.

3. The New Brunswick R. R., of which Edmondston is the terminus, length.....	415	664.00
--	-----	--------

This line is completely finished.

Carried forward.....	721	1953.60
----------------------	-----	---------

Brought forward.....	721	1953.60
The balance sheet for 1884-1885 shows the following results:		
	\$	\$ francs.
Total receipts.....	624969	
Receipts per mile.....	1482	
" kilometer		4630
Total expenditure.....	439576	
Expenditure per mile..	1058	
" " kilom.		3306
Total net proceeds....	175393	
Net proceeds per mile..	424	
" " kilometer		1314

If the above figures are correct, the surplus of receipts over expenditure for the year 1884-1885 would be sufficient to pay at the rate of $4\frac{1}{2}\%$ the interest and the sinking fund on a capital of \$3,879,400.

With respect to this line of 415 miles, a careful inquiry into its running in order to obtain the correct statement as to the conditions under which it is run should be made. This inquiry made, negotiations with the company could be commenced.

4. The extension from Edmonston, of the New Brunswick line along the Saint Lawrence in direction of Quebec.

The whole of this line has to be built, length about..... 108 172.80

The cost per mile may be estimated at \$24,000 or for the whole line \$2,592,000.

5. On the Saint Lawrence at Quebec, the crossing in summer is done by ferry boats. During

Carried forward..... 829 2126.40

Brought forward.....	829	2126.40
----------------------	-----	---------

winter, the crossing of persons or light freight, is both costly and difficult, as to heavy freight, it is hardly worth while speaking of it as it amounts to a trifle only.

This great inconvenience paralyses the traffic of the numerous lines which require free communication between the two shores.

A bridge over the Saint Lawrence has become an urgent necessity both for ordinary traffic and for railways.

The length of the Bridge and abutments may safely be put down at a maximum of.....	+	6.40
--	---	------

The estimates already prepared by different engineers vary in price from \$4,000,000 to \$7,000,000.

69 The <i>Intercolonial</i> covers 1051 miles...	1051	1681.60
--	------	---------

In adding to its actual length the projected lines destined to extend it to the Eastern Ports.

Total	1884	3014.40
-------------	------	---------

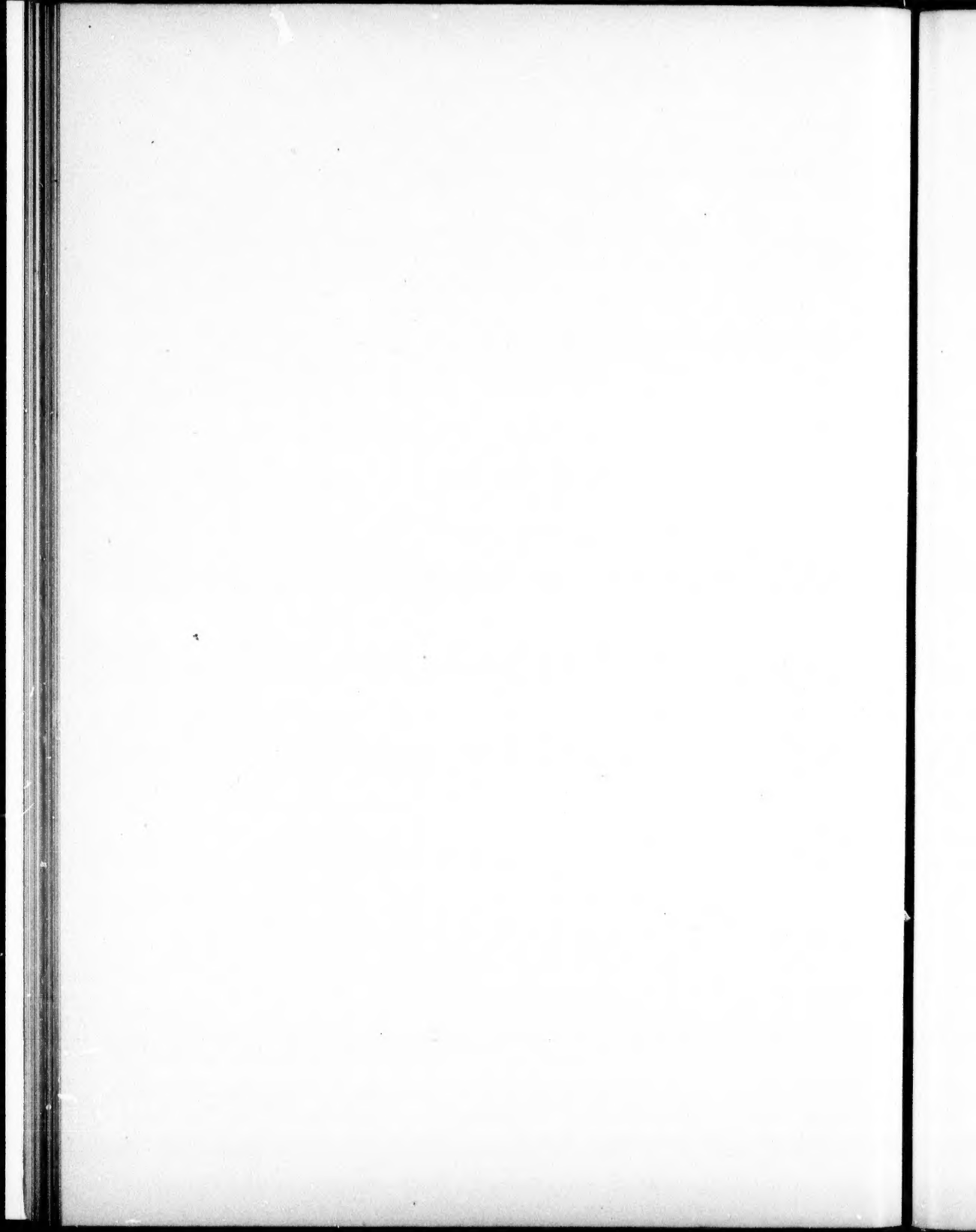
At the present moment the *Intercolonial* gives very poor returns, and every year Parliament is obliged to vote large sums of money to cover the deficit of its operations.

Time only and certain combination of a rather difficult character for the present, will, by proper economy in expenditure, effect good results and yield some profits.

What material results can we expect?

In what delay can we hope these results to be realized?

These are delicate questions, to which Mr. Lebrun, engineer of the Syndicate in spite of all the care and attention he has given to his mission has not yet been able to answer in a positive manner.



In conclusion, we may say that the combination which we purpose carrying out, forming a railway system of 1884 miles, which may well be called the *Great Eastern of Canada* would by means of the 6 above mentioned lines answer three purposes: 1^o It would be an active colonization agent; 2^o It would prove a powerful factor to the industrial development of Nova Scotia; 3^o It would be a connecting link between Canada and Europe, creating the shortest maritime route between the two continents of Europe and America.